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SENATE

REPORT
100-438

TECHNOLOGY-RELATED ASSISTANCE FOR INDIVIDUALS WITH DISABILITIES ACT OF 1988

JULY 28, 1988.—Ordered to be printed

Mr. KENNEDY, from the Committee on Labor and Human Resources, submitted the following

REPORT

[To accompany S. 2561]

The Committee on Labor and Human Resources to which was referred the bill (S. 2561) to establish a program of grants to States to promote the provision of technology-related assistance to individuals with disabilities, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill (as amended) do pass.

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I. TEXT OF THE BILL, AS REPORTED

A bill to establish a program of grants to States to promote the provision of technology-related assistance to individuals with disabilities, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

19-010

S543-13

SECTION 1. SHORT TITLE.

This Act may be cited as the "Technology-Related Assistance for Individuals With Disabilities Act of 1988".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress makes the following findings:

(1) During the past decade, there have been major advances in modern technology. Technology is now a powerful force in the lives of most residents of the United States.

(2) For all ~~individuals,~~ technology can provide important tools for making the performance of tasks quicker and easier.

(3) For some individuals with disabilities, assistive technology is a necessity that enables them to engage in or perform many tasks. The provision of assistive technology devices and assistive technology services enables some individuals with disabilities to—

(A) have greater control over their own lives;

(B) participate in and contribute more fully to activities in their home, school, and work environments, and in their communities;

(C) interact to a greater extent with nondisabled individuals; and

(D) otherwise benefit from opportunities that are taken for granted by individuals who do not have disabilities.

(4) Although the development of assistive technology devices designed to assist individuals with disabilities is still in its early stages, there already exist a substantial number of assistive technology devices, including simple adaptations to existing equipment, that could significantly benefit, in all major life activities, individuals of all ages with disabilities. Such devices, including adaptations, could be used in programs and activities such as early intervention, education, rehabilitation and training, employment, residential living, independent living, recreation, and other aspects of daily living.

(5) The use of assistive technology devices and services by individuals with disabilities can reduce the costs of the disabilities to society, individuals with disabilities, and families of individuals with disabilities by reducing expenditures associated with early intervention, education, rehabilitation, health care, transportation, telecommunication services, and other services required by individuals with disabilities.

(6) Many individuals with disabilities do not have access to the assistive technology devices and assistive technology services that such individuals need to allow such individuals to function in society commensurate with their abilities. States do not have comprehensive programs for making available technology-related assistance to individuals with disabilities. There is a lack of—

(A) resources to pay for such devices and services;

(B) trained personnel to provide such devices and services and to assist individuals with disabilities to use such devices and services;

(C) information about the potential of technology available to individuals with disabilities, the families or repre-

sentatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals;

(D) coordination among existing State human services programs, and among such programs and private agencies, particularly with respect to transitions between such programs and agencies; and

(E) capacity of such programs to provide the necessary technology-related assistance.

(7) There are insufficient incentives for the commercial pursuit of the application of technology devices to meet the needs of individuals with disabilities, because of limited markets.

(8) At the Federal level, there is a lack of coordination among agencies that provide or pay for the provision of assistive technology devices and assistive technology services. Also, the Federal Government does not provide adequate assistance and information with respect to the use of assistive technology devices and assistive technology services to individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals.

(b) PURPOSES.—The purposes of this Act are as follows:

(1) To provide financial assistance to the States to help each State to develop and implement a consumer-responsive statewide program of technology-related assistance for individuals of all ages with disabilities that is designed to—

(A) increase awareness of the needs of individuals with disabilities for assistive technology devices and assistive technology services;

(B) increase awareness of policies, practices, and procedures that facilitate or impede the availability or provision of assistive technology devices and assistive technology services;

(C) increase the availability of and funding for the provision of assistive technology devices and assistive technology services for individuals with disabilities;

(D) increase awareness and knowledge of the efficacy of assistive technology devices and assistive technology services among individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals;

(E) increase the capacity of public and private entities to provide technology-related assistance, particularly assistive technology devices and assistive technology services, and to pay for the provision of assistive technology devices and assistive technology services;

(F) increase coordination among State agencies and public and private entities that provide technology-related

assistance, particularly assistive technology devices and assistive technology services; and

(G) increase the probability that individuals of all ages with disabilities will, to the extent appropriate, be able to secure and maintain possession of assistive technology devices as such individuals make the transition between services offered by human service agencies or between settings of daily living.

(2) To facilitate—

(A) the identification of Federal policies that facilitate payment for assistive technology devices and assistive technology services for individuals with disabilities;

(B) the identification of Federal policies that impede such payment; and

(C) the elimination of inappropriate barriers to such payment.

(3) To enhance the ability of the Federal Government to provide the States with—

(A) technical assistance, information, and training and public awareness programs relating to the provision of assistive technology devices and assistive technology services; and

(B) funding for model demonstration and innovation projects.

SEC. 3. DEFINITIONS.

For purposes of this Act:

(1) ASSISTIVE TECHNOLOGY DEVICE.—The term "assistive technology device" means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

(2) ASSISTIVE TECHNOLOGY SERVICE.—The term "assistive technology service" means any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device. Such term includes—

(A) the evaluation of the needs of an individual with a disability, including a functional evaluation of the individual in the individual's customary environment;

(B) purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by individuals with disabilities;

(C) selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices;

(D) coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;

(E) training or technical assistance for an individual with disabilities, or, where appropriate, the family of an individual with disabilities; and

(F) training or technical assistance for professionals (including individuals providing education and rehabilitation

services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of individuals with disabilities.

(3) INDIVIDUAL WITH DISABILITIES.—The term "individual with disabilities" means any individual—

(A) who is considered to have a disability or handicap for the purposes of any Federal law other than this Act or for the purposes of the law of the State in which the individual resides; and

(B) who is or would be enabled by assistive technology devices or assistive technology services to maintain a level of functioning or to achieve a greater level of functioning in any major life activity.

(4) INSTITUTION OF HIGHER EDUCATION.—The term "institution of higher education" has the meaning given such term in section 435(b) of the Higher Education Act of 1965, and includes community colleges receiving funding under the Tribally Controlled Community College Assistance Act of 1978 (25 U.S.C. 1801 et seq.).

(5) SECRETARY.—The term "Secretary" means the Secretary of Education.

(6) STATE.—Except as otherwise provided, the term "State" means each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

(7) TECHNOLOGY-RELATED ASSISTANCE.—The term "technology-related assistance" means functions performed and activities carried out under section 101 that accomplish the purposes described in section 2(b)(1).

(8) UNDERSERVED GROUP.—The term "underserved group" means any group of individuals with disabilities who, because of disability, place of residence, geographic location, age, race, sex, or socioeconomic status, have not historically sought, been eligible for, or received technology-related assistance.

TITLE I—GRANTS TO STATES

SEC. 101. PROGRAM AUTHORIZED.

(a) GRANTS TO STATES.—The Secretary of Education shall make grants to States in accordance with the provisions of this title to assist States to develop and implement consumer-responsive comprehensive statewide programs of technology-related assistance that accomplish the purposes described in section 2(b)(1).

(b) FUNCTIONS OF PROGRAMS.—Any State that receives a grant under this title may accomplish the purposes described in section 2(b)(1) by carrying out any of the following functions:

(1) IDENTIFICATION AND NEEDS ASSESSMENT.—Identification of individuals with disabilities (including individuals from underserved groups) who reside in the State and the conduct of an ongoing evaluation of the needs of such individuals for technology-related assistance, which may be based on existing data.

(2) IDENTIFICATION AND COORDINATION OF RESOURCES.—Identification and coordination of Federal and State policies, resources, and services relating to the provision of assistive technology devices and assistive technology services to individuals with disabilities, including entering into interagency agreements.

(3) PROVISION OF ASSISTIVE TECHNOLOGY DEVICES AND ASSISTIVE TECHNOLOGY SERVICES.—Provision of assistive technology devices and assistive technology services to individuals with disabilities and payment for the provision of assistive technology devices and assistive technology services.

(4) DISSEMINATION OF INFORMATION.—Dissemination of information relating to technology-related assistance and sources of funding for assistive technology devices and assistive technology services to individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals.

(5) TRAINING AND TECHNICAL ASSISTANCE.—Provision of training and technical assistance relating to assistive technology devices and assistive technology services to individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals.

(6) PUBLIC AWARENESS PROGRAM.—Conduct of a public awareness program focusing on the efficacy and availability of assistive technology devices and assistive technology services for individuals with disabilities.

(7) ASSISTANCE TO STATEWIDE AND COMMUNITY-BASED ORGANIZATIONS.—Provision of assistance to statewide and community-based organizations or systems that provide assistive technology services to individuals with disabilities.

(8) PARTNERSHIPS AND COOPERATIVE INITIATIVES.—Support of the establishment or continuation of partnerships and cooperative initiatives between the public sector and the private sector to facilitate the development and implementation of a statewide program of technology-related assistance for individuals with disabilities.

(9) QUALIFICATIONS OF STAFF.—Taking actions to develop standards, or where appropriate, apply existing standards to ensure the availability of qualified personnel.

(10) PROGRAM DATA.—Compilation and evaluation of appropriate data relating to the program.

(11) PROCEDURES FOR INVOLVEMENT OF CONCERNED INDIVIDUALS.—The establishment of procedures providing for the active involvement of individuals with disabilities, the families or representatives of such individuals, and other appropriate individuals in the development and implementation of the program, and for the active involvement, to the maximum extent appropriate, of individuals with disabilities who use assistive technology devices and assistive technology services in deci-

sions relating to such assistive technology devices and assistive technology services.

(12) OTHER FUNCTIONS.—Any other functions the Secretary considers appropriate.

(c) AUTHORIZED ACTIVITIES.—In carrying out the functions described in subsection (b), any State may use amounts made available to the State under a grant under this title for activities including the following:

(1) MODEL DELIVERY SYSTEMS.—The State may support model systems for the delivery of assistive technology devices and assistive technology services to individuals with disabilities that if successful could be replicated or made generally applicable. Any such system may include—

(A) the purchase, lease, or other acquisition of assistive technology devices and assistive technology services or payment for the provision of assistive technology devices and assistive technology services;

(B) the use of counselors, including peer counselors, to assist individuals with disabilities and the families of individuals with disabilities to obtain assistive technology devices and assistive technology services;

(C) the involvement of individuals with disabilities or, if appropriate, families or representatives of individuals with disabilities in decisions related to the provision of assistive technology devices and assistive technology services to individuals with disabilities; and

(D) the evaluation of the efficacy of the particular model delivery system involved.

(2) STATEWIDE NEEDS ASSESSMENT.—The State may conduct a statewide needs assessment, which may be based on existing data and may include—

(A) estimates of the numbers of individuals with disabilities within the State, categorized by residence, type and extent of disabilities, age, race, gender, and ethnicity;

(B) a description of efforts during the fiscal year ending before the date of the enactment of this Act to provide assistive technology devices and assistive technology services to individuals with disabilities within the State, including—

(i) the number of individuals with disabilities who received appropriate assistive technology devices and assistive technology services; and

(ii) a description of the devices and services provided;

(C) the number of individuals with disabilities who are in need of assistive technology devices and assistive technology services, and a description of the devices and services needed;

(D) the cost of providing assistive technology devices and assistive technology services to all individuals with disabilities within the State who need such devices and services;

(E) a description of State and local public resources and private resources (including insurance) that are available

to establish a statewide program of technology-related assistance for individuals with disabilities;

(F) the identification of State and Federal policies that facilitate or interfere with the operation of a statewide program of technology-related assistance;

(G) a description of—

(i) alternative State-financed systems of subsidies for the provision of assistive technology devices and assistive technology services, including—

(I) a loan system for assistive technology devices;

(II) a low-interest loan fund;

(III) a revolving fund;

(IV) a loan insurance program; and

(V) a partnership with private entities for the purchase, lease, or other acquisition of assistive technology devices or the provision of assistive technology services; and

(ii) a description of the eligibility criteria for such a system;

(H) a description of the State's procurement policies and the extent to which such policies will ensure, to the extent practicable, that assistive technology devices purchased, leased, or otherwise acquired with assistance under a grant under this title are compatible with other technology devices, including technology devices designed primarily for use by individuals without disabilities, elderly individuals, or individuals with particular disabilities; and

(I) an inquiry into whether it is advantageous for either a State agency or a task force (composed of individuals representing the State and individuals representing the private sector) to study the practices of private insurance companies holding licenses within the State that offer health or disability insurance policies under which an individual may obtain reimbursement for—

(i) the purchase, lease, or other acquisition of assistive technology devices; or

(ii) the use of assistive technology services.

(3) SUPPORT GROUPS.—The State may encourage the creation or maintenance of statewide or community-based organizations or systems that assist individuals with disabilities to use assistive technology devices or assistive technology services, or support any existing organization or system that provides such assistance.

(4) PUBLIC AWARENESS PROGRAM.—The State may support a public awareness program designed to provide information relating to the availability and efficacy of assistive technology devices and assistive technology services for individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals, or may establish and support such a program if no such program exists. Such a program may include—

(A) the development and dissemination of information relating to—

(i) the nature of assistive technology devices and assistive technology services;

(ii) the appropriateness, cost, and availability of, and access to assistive technology devices and assistive technology services; and

(iii) the efficacy of assistive technology devices and assistive technology services with respect to enhancing the capacity of individuals with disabilities;

(B) procedures for providing direct communication between public providers of assistive technology devices and assistive technology services and private providers of such devices and services (including employers); and

(C) the development and dissemination of information relating to—

(i) use of the program by individuals with disabilities, families or representatives of individuals with disabilities, and professionals who work in the field of technology-related assistance, and other appropriate individuals; and

(ii) the nature of the inquiries made by the individuals described in clause (i).

(5) TRAINING AND TECHNICAL ASSISTANCE.—The State may provide directly or support public or private training and technical assistance activities relating to the use of assistive technology devices and assistive technology services to individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals.

(6) ACCESS TO TECHNOLOGY-RELATED INFORMATION.—The State may develop, operate, or expand a system for public access to information concerning technology-related assistance, including information about assistive technology devices and assistive technology services, funding sources, costs, and individuals, organizations, and agencies capable of providing technology-related assistance to individuals with disabilities. In developing, operating, or expanding a system described in the preceding sentence, the State may—

(A) develop, compile, and categorize print, braille, audio, and video materials containing the information described in such sentence;

(B) identify and classify existing funding sources, conditions of and criteria for access to such sources, including any funding mechanisms or strategies developed by the State;

(C) identify existing support groups and systems designed to help individuals with disabilities make effective use of technology-related assistance; and

(D) maintain a record of the extent to which citizens of the State use or make inquiries of the system established under this paragraph, and of the nature of such inquiries.

(7) INTERSTATE AGREEMENTS.—The State may enter into cooperative agreements with other States to expand the capacity of the States involved to assist individuals of all ages with disabilities to learn about, acquire, use, maintain, adapt, and upgrade assistive technology devices and assistive technology services that such individuals need at home, school, work, or in other environments that are part of daily living.

(8) OTHER ACTIVITIES.—The State may utilize amounts made available under grants made under this title for any other activities necessary for developing, implementing, or evaluating the statewide program of technology-related assistance.

SEC. 102. DEVELOPMENT GRANTS.

(a) GENERAL AUTHORITY.—The Secretary shall award to States 3-year grants to assist States to develop and implement statewide programs of technology-related assistance for individuals with disabilities in accordance with the provisions of section 101.

(b) NUMBER OF GRANTS TO BE AWARDED.—From amounts appropriated under section 106, the Secretary shall award under this section, to the extent appropriate applications are submitted—

(1) in the first fiscal year for which amounts are appropriated, not more than 10 grants on a competitive basis;

(2) in the second fiscal year for which amounts are appropriated, not more than 20 grants on a competitive basis; and

(3) in the third fiscal year for which amounts are appropriated, any number of grants on a competitive basis.

(c) AMOUNTS OF GRANTS.—

(1) GRANTS TO STATES.—From amounts appropriated under section 106, the Secretary shall pay to each State that receives a grant under this section—

(A) for each of the first 2 years of the grant period, an amount that is not less than $500,000 and not more than $1,000,000; and

(B) for the third year of the grant period, an amount that is not less than $500,000 and not more than $1,500,000.

(2) GRANTS TO TERRITORIES.—From amounts appropriated under section 106 for any fiscal year, the Secretary shall pay to each territory that receives a grant under this section not more than $150,000.

(3) CALCULATION OF AMOUNTS.—The Secretary shall calculate the amounts described in paragraphs (1) and (2) on the basis of—

(A) amounts available for making grants under this section;

(B) the population of the State or territory concerned; and

(C) the types of activities proposed by the State relating to the development of a statewide program of technology-related assistance.

(4) PRIORITY FOR PREVIOUSLY PARTICIPATING STATES.—Amounts appropriated for purposes of carrying out the provisions of this section in each of the 2 fiscal years succeeding the fiscal year in which amounts are first appropriated for such

purposes shall first be made available to States that received grants under this section during the fiscal year preceding the fiscal year concerned.

(5) DEFINITIONS.—For purposes of this subsection:

(A) The term "State" does not include the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands.

(B) The term "territory" means the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

(d) PRIORITIES FOR DISTRIBUTION.—To the extent practicable, the Secretary shall award grants to States under this section in a manner that—

(1) is geographically equitable; and

(2) distributes the grants among States that have differing levels of development of statewide programs of technology-related assistance.

(e) APPLICATIONS.—Any State that desires to receive a grant under this section shall submit an application that contains the following information and assurances:

(1) DESIGNATION OF RESPONSIBLE ENTITY.—The designation by the Governor of the office, agency, entity, or individual responsible for—

(A) preparing the application;

(B) administering and supervising the use of amounts made available under the grant;

(C) planning and developing the statewide program of technology-related assistance;

(D) coordination between public and private agencies, including the entering into of interagency agreements;

(E) ensuring active, timely, and meaningful participation by individuals with disabilities, the families or representatives of such individuals, and other appropriate individuals with respect to performing functions and carrying out activities under the grant; and

(F) the delegation of any responsibilities described above, in whole or in part, to one or more appropriate offices, agencies, entities, or individuals.

(2) AGENCY INVOLVEMENT.—A description of the nature and extent of involvement of various State agencies in the preparation of the application and the continuing role of such agencies in the development of the statewide program of technology-related assistance.

(3) PUBLIC INVOLVEMENT.—A description of the nature and extent of involvement of individuals with disabilities, the families or representatives of such individuals, and other appropriate individuals who are not employed by a State agency in the development of the application and the continuing role of such individuals in the development of the statewide program of technology-related assistance.

(4) PRELIMINARY NEEDS ASSESSMENT.—A tentative assessment of the extent of the need of individuals with disabilities in the

State, including individuals from underserved groups, for a statewide program of technology-related assistance and a description of previous efforts and efforts continuing on the date of the application to develop a statewide program of technology-related assistance.

(5) STATE RESOURCES.—A description of State resources and other resources (to the extent such information is available) that are available to commit to the development of a statewide program of technology-related assistance.

(6) GOALS, OBJECTIVES, FUNCTIONS, ACTIVITIES, AND OUTCOMES.—The State's goals, objectives, functions, and activities planned under the grant, and the expected outcomes at the end of the grant period with respect to a consumer-responsive statewide program of technology-related assistance, consistent with the purposes described in section 2(b)(1).

(7) INFORMATION AND EVALUATIONS.—A description of—

(A) procedures used for compiling information; and

(B) procedures that will be used to conduct evaluations.

(8) STATE POLICIES WITH RESPECT TO CONTRACTS AND AGREEMENTS.—A description of the policies governing contracts, grants, and other arrangements with public agencies, private nonprofit organizations, and other entities or individuals for the purpose of providing assistive technology devices and assistive technology services consistent with the provisions of this title.

(9) DISTRIBUTION PROCEDURE.—An assurance that, to the extent practicable, technology-related assistance made available with amounts received under the grant will be equitably distributed among all geographical areas of the State.

(10) COMPLIANCE WITH ACT.—An assurance that amounts received under the grant will be expended in accordance with the provisions of this title.

(11) SUPPLEMENT OTHER FUNDS.—An assurance that amounts received under the grant—

(A) will be used to supplement amounts available from other sources that are expended for technology-related assistance, including the provision of assistive technology devices and assistive technology services; and

(B) will not be used to pay a financial obligation for technology-related assistance (including the provision of assistive technology devices or assistive technology services) that would have been paid with amounts available from other sources if amounts under the grant had not been available, unless—

(i) such payment is made only to prevent a delay in the receipt of appropriate technology-related assistance (including the provision of assistive technology devices or assistive technology services) by an individual with disabilities; and

(ii) the entity or agency responsible subsequently reimburses the appropriate account with respect to programs and activities under the grant in an amount equal to the amount of the payment.

(12) CONTROL OF FUNDS AND PROPERTY.—An assurance that—

(A) a public agency shall control and administer amounts received under the grant; and

(B) a public agency or an individual with disabilities shall—

(i) hold title to property purchased with such amounts; and

(ii) administer such property.

(13) REPORTS.—An assurance that the State will—

(A) prepare reports to the Secretary in such form and containing such information as the Secretary may require to carry out the Secretary's functions under this title; and

(B) keep such records and allow access to such records as the Secretary may require to ensure the correctness and verification of information provided to the Secretary under this paragraph.

(14) COMMINGLING OF FUNDS.—An assurance that amounts received under the grant will not be commingled with State or other funds.

(15) FISCAL CONTROL AND ACCOUNTING PROCEDURES.—An assurance that the State will adopt such fiscal control and accounting procedures as may be necessary to ensure proper disbursement of and accounting for amounts received under the grant.

(16) AVAILABILITY OF INFORMATION.—An assurance that the State will—

(A) make available to individuals with disabilities and the families or representatives of individuals with disabilities information concerning technology-related assistance in a form that will allow such individuals to effectively use such information; and

(B) in preparing such information for dissemination, consider the media-related needs of individuals with disabilities who have sensory and cognitive limitations and consider the use of auditory materials, including audio cassettes, visual materials, including video cassettes and video discs, and braille materials.

(17) OTHER INFORMATION.—Such other information and assurances as the Secretary may reasonably require.

SEC. 103. EXTENSION GRANTS.

(a) GENERAL AUTHORITY.—The Secretary may award a 2-year extension grant to any State that demonstrates to the Secretary that the State made significant progress in developing and implementing a statewide program of technology-related assistance under a grant provided under section 102, consistent with the requirements of such section and the purposes described in section 2(b)(1).

(b) AMOUNTS OF GRANTS.—

(1) IN GENERAL.—(A) From amounts appropriated under section 106 for any fiscal year, the Secretary shall pay to each State that receives a grant under this section an amount that is not less than $500,000 and not more than $1,500,000.

(B) From amounts appropriated under section 106 for any fiscal year, the Secretary shall pay to each territory that receives a grant under this section not more than $150,000.

(C) For purposes of this paragraph:

(i) The term "State" does not include the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands.

(ii) The term "territory" means the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

(2) CALCULATION OF AMOUNT.—The Secretary shall calculate the amount described in paragraph (1) on the basis of—

(A) amounts available for making grants pursuant to this section,

(B) the population of the State;

(C) the types of assistance to be provided; and

(D) the amount of resources committed and available from other sources.

(3) PRIORITY FOR PREVIOUSLY PARTICIPATING STATES.—Amounts appropriated in any fiscal year for purposes of carrying out the provisions of this section shall first be made available to States that received grants under this section during the fiscal year preceding the fiscal year concerned.

(c) APPLICATION.—A State that desires to receive an extension grant under this section shall submit an application that contains the following:

(1) NEEDS.—A description of needs relating to technology-related assistance of individuals with disabilities, including individuals from underserved groups, families or representatives of individuals with disabilities, and other appropriate individuals within the State.

(2) ACTIVITIES UNDER DEVELOPMENT GRANT.—A description of the specific activities carried out under the development grant received under section 102 and the relationship of such activities to the development of a statewide program of technology-related assistance.

(3) PROGRESS.—Documentation of the progress made under the development grant toward development of a statewide program of technology-related assistance.

(4) PUBLIC INVOLVEMENT.—A description of State actions designed to determine the degree of satisfaction of individuals with disabilities, families or representatives of individuals with disabilities, public and private service providers, employers, and other appropriate individuals with—

(A) the degree of their ongoing involvement in the development and implementation of the statewide program of technology-related assistance;

(B) the specific activities carried out by the State under the development grant; and

(C) progress made toward development and implementation of a consumer-responsive statewide program of technology-related assistance under the development grant.

(5) COMMENTS.—A summary of any comments received concerning the issues described in paragraph (4) and the State's response to such comments, solicited from individuals affected

by the statewide program of technology-related assistance, including individuals with disabilities, families or representatives of individuals with disabilities, public and private service providers, employers, and other appropriate individuals.

(6) OTHER INFORMATION AND ASSURANCES.—The information and assurances described in section 102(e), except the preliminary needs assessment described in section 102(e)(4).

(7) COMPATIBILITY AND ACCESSIBILITY OF ELECTRONIC EQUIPMENT.—An assurance that the State will comply with guidelines established under section 508 of the Rehabilitation Act of 1973.

SEC. 104. PROGRESS REPORTS.

(a) IN GENERAL.—Each State that receives a grant under this title shall submit to the Secretary annually a report that describes—

(1) completed activities carried out under the grant, especially with regard to section 102(e)(6), including, to the extent appropriate, a description of the impact of such activities on individuals with disabilities, public agencies, financial resources committed to technology-related assistance for individuals with disabilities, community-based organizations, and employers;

(2) unanticipated problems encountered in carrying out such activities;

(3) activities planned to rectify such problems in the following year.

(b) SPECIFIC REQUIREMENTS FOR REPORTS WITH RESPECT TO EXTENSION GRANTS.—Each State that receives a development grant under section 102 may include, and each State that receives an extension grant under section 103 shall include in the report required by subsection (a) a description of—

(1) the types of assistance provided under the grant and the effects of such assistance, especially with respect to individuals with disabilities;

(2) the types of environments in which assistance was provided under the grant; and

(3) how the information required by this subsection was derived.

SEC. 105. ADMINISTRATIVE PROVISIONS.

(a) REVIEW OF PARTICIPATING STATES.—

(1) IN GENERAL.—The Secretary shall establish a system to assess the extent to which States that receive grants pursuant to this title are making significant progress in achieving the purposes of this title.

(2) ONSITE VISITS.—(A) The Secretary shall conduct an onsite visit during the final year of each State's participation in the development grant program. Two-thirds of the onsite monitoring team in each case shall be qualified peer reviewers from other participating States.

(B)(i) Members of any onsite monitoring team who are officers or full-time employees of the United States shall serve without compensation in addition to that received for their services as officers or employees of the United States, but they may be allowed travel expenses, including per diem in lieu of

subsistence, as authorized by section 5702 of title 5, United States Code, for individuals in the Government service traveling on official business.

(ii) Members of any onsite monitoring team who are not officers or full-time employees of the United States shall receive compensation at a rate not to exceed the daily equivalent of the pay rate specified for GS–18 of the General Schedule under section 5332 of title 5, United States Code, for each day (including traveltime) during which such members are engaged in the actual performance of their duties as members of an onsite monitoring team. In addition, such members may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code, for individuals in the Government service employed intermittently.

(3) MINIMUM REQUIREMENTS.—At a minimum the visits shall allow the Secretary to determine the extent to which the State is making significant progress in developing a statewide program of technology-related assistance consistent with the purposes described in section 2(b)(1).

(4) PROVISION OF INFORMATION.—To assist the Secretary in carrying out the responsibilities of the Secretary under this section, the Secretary may require States to provide relevant information.

(b) CORRECTIVE ACTION PLAN.—

(1) IN GENERAL.—Any State that fails to comply with the requirements of this title shall be subject to a corrective action plan.

(2) PENALTIES.—A State that fails to comply with the requirements of this title may be subject to penalties such as—

(A) partial or complete fund termination;

(B) ineligibility to participate in the grant program in the following year; or

(C) reduction in funding for the following year.

(3) APPEALS PROCEDURES.—The Secretary shall establish appeals procedures for States that are found in noncompliance with the provisions of this title as the result of an onsite visit or failure to supply information required under subsection (a)(4).

(c) EFFECT ON OTHER ASSISTANCE.—Nothing in this title shall be construed to permit the State or any Federal agency to reduce medical or other assistance available or to alter eligibility under—

(1) title II, V, XVI, XVIII, XIX, or XX of the Social Security Act;

(2) the Education of the Handicapped Act;

(3) the Rehabilitation Act of 1973; or

(4) laws relating to veterans' benefits.

SEC. 106. AUTHORIZATION OF APPROPRIATIONS.

(a) IN GENERAL.—There are authorized to be appropriated to carry out this title $9,000,000 for the fiscal year 1989 and such sums as may be necessary for each succeeding fiscal year ending before October 1, 1993.

(b) RESERVATION.—

(1) PROVISION OF INFORMATION.—The Secretary shall reserve 1 percent of funds appropriated in any fiscal year under subsection (a), or $500,000, whichever is greater, for the purpose of providing States with information and technical assistance with respect to the development and implementation of consumer-responsive statewide programs of technology-related assistance.

(2) ONSITE VISITS.—The Secretary may reserve from amounts appropriated in any fiscal year under subsection (a) such sums as the Secretary considers necessary for the purposes of conducting onsite visits as required by section 105(a)(2).

SEC. 107. EVALUATION.

(a) EVALUATION.—

(1) IN GENERAL.—The Secretary, directly or by contract, shall conduct a national evaluation of the program of grants to States authorized by this title.

(2) REPORT TO CONGRESS.—The Secretary shall report to the Congress on the results of the evaluation conducted as required by paragraph (1) not later than October 1, 1992.

(b) PURPOSE.—The purpose of the evaluation required by subsection (a) shall be—

(1) to assess, through representative samples, the status and effects of State efforts to develop statewide programs of technology-related assistance for individuals with disabilities in a manner consistent with the provisions of this title, particularly in terms of the impact of such efforts on individuals with disabilities; and

(2) to recommend amendments to this title that the Secretary considers necessary to assist States to fully accomplish the purposes of this title.

(c) INFORMATION SYSTEM.—The Secretary shall work with the States to consider and develop an information system designed to report and compile, from information provided by the States, a qualitative and quantitative description of the impact of the program of grants to States authorized by this title on—

(1) the lives of individuals with disabilities, particularly with regard to the purposes described in section 2(a)(3);

(2) public agencies;

(3) fiscal resources committed to technology-related assistance for individuals with disabilities;

(4) community-based organizations; and

(5) employers.

TITLE II—PROGRAMS OF NATIONAL SIGNIFICANCE

PART A—STUDY ON FINANCING OF ASSISTIVE TECHNOLOGY DEVICES AND ASSISTIVE TECHNOLOGY SERVICES FOR INDIVIDUALS WITH DISABILITIES

SEC. 201. STUDY BY NATIONAL COUNCIL ON THE HANDICAPPED.

(a) STUDY AND RECOMMENDATIONS.—The National Council on the Handicapped (hereafter in this part referred to as the "Council"),

in addition to the duties of the Council described in section 401 of the Rehabilitation Act of 1973, shall conduct a study and make recommendations to the Congress and the President concerning—

(1) Federal laws, regulations, procedures, and practices that facilitate or impede the ability of the States to develop and implement consumer-responsive statewide programs of technology-related assistance for individuals with disabilities;

(2) Federal and State laws, regulations, procedures, and practices that facilitate or impede the acquisition of, financing of, or payment for assistive technology devices and assistive technology services for individuals with disabilities;

(3) policies, practices, and procedures of private entities (including insurers) that facilitate or impede the acquisition of, financing of, or payment for assistive technology devices and assistive technology services for individuals with disabilities; and

(4) alternative strategies for acquiring or paying for assistive technology devices and assistive technology services.

(b) ADVISORY COMMITTEE.—The Council shall appoint an advisory committee in accordance with section 404(c) of the Rehabilitation Act of 1973 to assist the Council in carrying out the duties of the Council under this part. Such advisory committee shall be appointed from individuals from both the public and private sectors who have broad experience and expertise directly relevant to the issues to be studied by the Council under this part, and shall also include individuals with disabilities, families of individuals with disabilities, and representatives of organizations representing individuals with disabilities.

(c) COOPERATION OF OTHER AGENCIES.—

(1) FEDERAL AGENCIES.—The heads of all Federal agencies shall, to the extent not prohibited by law, cooperate with the Council in carrying out the duties of the Council under this part.

(2) USE OF RESOURCES OF FEDERAL, STATE, AND LOCAL AGENCIES.—The Council may use in carrying out its duties under this part, with the consent of the agency involved, services, personnel, information, and facilities of other Federal, State, local, and private agencies, with or without reimbursement.

(d) REPORTS.—The Council shall submit to the President and to the appropriate committees of the Congress—

(1) such interim reports as the Council considers advisable; and

(2) not later than 18 months after the date of the enactment of an Act providing appropriations to carry out this part, a final report of its study and investigation together with such recommendations, including specific proposals for legislation, as the Council considers advisable.

PART B—NATIONAL INFORMATION AND PROGRAM REFERRAL NETWORK

SEC. 211. ESTABLISHMENT OF NATIONAL INFORMATION AND PROGRAM REFERRAL NETWORK.

Before the end of the 30-month period beginning on the date of the enactment of an Act providing appropriations to carry out this part, the Secretary shall—

(1) determine whether it is appropriate, based on the findings and recommendations of the study conducted under section 212, to establish and operate a national information and program referral network to assist States to develop and implement consumer-responsive statewide programs of technology-related assistance; and

(2) if the Secretary determines that establishment and operation of such a network is appropriate, enter into any contract or cooperative agreement necessary to establish and operate such a network, which may consist of information and program referral networks in existence or under development at the time of the study conducted under section 212.

SEC. 212. FEASIBILITY STUDY REQUIRED.

(a) IN GENERAL.—The Secretary shall conduct a study—

(1) to determine the feasibility and desirability of creating the network described in section 211; and

(2) to determine the appropriate structure for the organization and operation of such a network, if it is determined to be feasible and desirable.

(b) CONTRACT AUTHORITY.—In carrying out the study required by subsection (a), the Secretary may enter into a contract or cooperative agreement necessary to conduct the study.

SEC. 213. CONTENTS OF STUDY.

The study conducted under section 212 shall—

(1) analyze the needs of States that are interested in developing and implementing consumer-responsive statewide programs of technology-related assistance;

(2) describe the types of information and program referral networks (including electronic networks) in existence or under development at the time of the study, including—

(A) the types of information and program referral incorporated into or provided by such networks;

(B) the cost of maintaining such networks;

(C) the types of services provided by such networks;

(D) the types and numbers of individuals served by such networks;

(E) the location of such networks and accessibility to other networks; and

(F) the feasibility and desirability of linking such networks, including proposed plans and an estimate of the cost of such a linkage;

(3) analyze the impediments to the exchange of information and the development and operation of such networks;

(4) describe the information that should be incorporated into a national information and program referral network to ensure that the network serves the entire United States, in particular addressing the gaps in existing networks and methods of filling such gaps using networks in existence or under development at the time of the study;

(5) describe the information systems from other fields of technology development that may be incorporated into a national information and program referral network on technology-related assistance;

(6) analyze the issues involved in operating a national information and program referral network;

(7) analyze and describe management and cost projections for a national information and program referral network;

(8) evaluate operational alternatives including at least the advantages and disadvantages of—

(A) grant arrangements, contracting arrangements, or other funding mechanisms or arrangements, and the lengths of any such arrangements;

(B) various network configurations, including—

(i) regionally distributed;

(ii) focused on functional limitations;

(iii) age-focused;

(iv) expertise-centered; and

(v) other network configurations;

(C) costs associated with funding arrangements described in subparagraph (A) and network configurations described in subparagraph (B), and options for paying such costs, including the possible use of Federal funds, State funds, and other alternatives;

(D) mechanisms of payment for information and program referral services;

(E) mechanisms for ensuring that information systems remain current, have relevant and useful information, and provide information in a form that allows individuals with disabilities to make effective use of the information;

(F) forms of Federal oversight and independent evaluations that could be applied to a national information and program referral network;

(G) types of staffing expertise required for different options; and

(H) types of institutional oversight, such as governing boards and advisory panels; and

(9) a timetable for implementation of various network options.

SEC. 214. TIMETABLE FOR STUDY.

(a) AWARD OF CONTRACT.—The Secretary shall, before the end of the six-month period beginning on the date of the enactment of an Act providing appropriations to carry out the study required by this part, enter into any contract or cooperative agreement necessary for conducting such study.

(b) COMPLETION OF STUDY.—Any contract or agreement entered into under subsection (a) shall require the study to be completed

and a report concerning such study to be submitted to the Secretary and to the appropriate committees of the Congress before the end of the 18-month period beginning on the date of the contract or agreement.

(c) IMPLEMENTATION OF RECOMMENDATIONS.—The Secretary, after allowing for public comment on the report submitted under subsection (b), shall take appropriate action based on the report before the end of the 6-month period following the date on which the Secretary receives the report.

PART C—TRAINING AND PUBLIC AWARENESS PROJECTS

SEC. 221. TRAINING.

(a) TECHNOLOGY TRAINING.—

(1) GENERAL AUTHORITY.—The Secretary shall enter into contracts or cooperative agreements with appropriate nonprofit or for-profit entities for the purposes of—

(A) conducting training sessions; and

(B) developing, demonstrating, disseminating, and evaluating curricula, materials, and methods used to train individuals regarding the provision of technology-related assistance.

(2) ELIGIBLE ACTIVITIES.—Activities conducted under contracts or cooperative agreements entered into under paragraph (1) may address the training needs of individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals.

(b) TECHNOLOGY CAREERS.—

(1) GENERAL AUTHORITY.—The Secretary shall make grants to assist institutions of higher education to prepare personnel for careers relating to the provision of technology-related assistance to individuals with disabilities.

(2) PRIORITY.—In awarding grants under paragraph (1), the Secretary shall give priority to the preparation of personnel who will provide technical assistance, administer programs, or prepare personnel necessary to support the development and implementation of consumer-responsive statewide programs of technology-related assistance to individuals with disabilities.

(3) USES OF FUNDS.—Amounts made available for grants under paragraph (1) may be used by institutions of higher education to assist in covering the cost of courses of training or study for such personnel and for establishing and maintaining fellowships or traineeships with such stipends and allowances as may be determined by the Secretary.

SEC. 222. PUBLIC AWARENESS PROJECTS.

(a) PROGRAM AUTHORIZED.—The Secretary shall make grants to, or enter into contracts with, nonprofit and for-profit entities to carry out national projects that recognize and build awareness of the importance and efficacy of assistive technology devices and as-

sistive technology services for individuals of all ages with disabilities functioning in various settings of daily life.

(b) USES OF FUNDS.—Amounts made available for grants and contracts under subsection (a) may be used to—

(1) develop a national media campaign (including public service time slots on radio and television);

(2) convene national or regional conferences;

(3) prepare and disseminate information (including summaries, comparisons, analyses, and cost-benefit projections) concerning the efficacy of technology-related assistance;

(4) encourage others to hold national or regional conferences;

(5) develop and maintain recognition programs that are designed to promote public credit to entities that demonstrate an aggressive effort for a sustained time to provide or promote the use of technology-related assistance or the development of assistive technology devices; and

(6) other activities considered appropriate by the Secretary.

SEC. 223. PRIORITIES.

(a) IN GENERAL.—Beginning in fiscal year 1991, the Secretary shall—

(1) establish priorities for activities carried out with assistance under this part;

(2) publish such priorities in the Federal Register for the purpose of receiving public comment; and

(3) publish such priorities in the Federal Register in final form not later than the date on which the Secretary publishes grant announcements for grants made under this part.

(b) EXPLANATION OF DETERMINATION OF PRIORITIES.—Concurrent with the publication required by subsection (a), the Secretary shall publish in the Federal Register an explanation of how the priorities were determined.

PART D—DEMONSTRATION AND INNOVATION PROJECTS

SEC. 231. PROGRAM AUTHORIZED.

(a) DEMONSTRATION AND INNOVATION PROJECTS.—The Secretary shall make grants to, or enter into contracts or cooperative agreements with, nonprofit and for-profit entities to pay all or part of the cost of establishing or operating demonstration and innovation projects relating to technology-related assistance for individuals with disabilities.

(b) ELIGIBLE ACTIVITIES.—Amounts made available for purposes of carrying out this part may be used for the following activities:

(1) MODEL PROJECTS FOR DELIVERING ASSISTIVE TECHNOLOGY DEVICES AND SERVICES.—The establishment or operation of model projects for delivering assistive technology devices and assistive technology services to individuals of all ages with disabilities functioning in various environments and carrying out various life activities (including model systems described in section 101(c)(1) of title I).

(2) MODEL RESEARCH AND DEVELOPMENT PROJECTS.—The conduct of applied research and development projects, including projects designed to—

(A) increase the availability of reliable and durable assistive technology devices that address unique, low-market demand, or complex technology-related needs for individuals with disabilities;

(B) develop strategies and techniques that involve individuals with disabilities in assessing the performance characteristics of technology that is not designed specifically for individuals with disabilities and developing adaptations of such technology for individuals with disabilities;

(C) assist in the transfer of technology that is not specifically designed for individuals with disabilities to uses appropriate for such individuals; and

(D) facilitate effective and efficient technology transfer.

(3) INCOME-CONTINGENT DIRECT LOAN DEMONSTRATION PROJECT.—Demonstration projects in accordance with regulations issued by the Secretary (which may include a requirement that the Secretary shall provide an amount equal to not more than 90 percent of the amount required for any such project) to examine the feasibility of a direct loan program that would provide loans—

(A) to individuals with disabilities who require technology-related assistance in order to maintain a level of functioning or to achieve a greater level of functioning in any major life activity; or

(B) to the families or employers of individuals with disabilities, on behalf of such individuals, for the purposes described in subparagraph (A).

(c) REPORT TO CONGRESS ON EXTENSION OF DIRECT LOAN PROGRAM.—The Secretary shall, based on the projects assisted under subsection (b)(3), report to Congress concerning the feasibility of operating a direct loan program of general applicability beginning after September 30, 1993.

PART E—AUTHORIZATION OF APPROPRIATIONS

SEC. 241. AUTHORIZATION OF APPROPRIATIONS.

(a) GENERAL AUTHORITY.—There are authorized to be appropriated for purposes of carrying out this title (other than section 231(b)(1)) $5,000,000 for the fiscal year 1989 and such sums as may be necessary for each of the fiscal years 1990, 1991, 1992, and 1993.

(b) MODEL DELIVERY PROJECTS.—There are authorized to be appropriated for purposes of carrying out section 231(b)(1) $1,500,000 for the fiscal year 1989 and such sums as may be necessary for each of the fiscal years 1990, 1991, 1992, and 1993.

(c) PRIORITIES.—

(1) MODEL DELIVERY PROJECTS.—Notwithstanding any other provision of this Act, if amounts appropriated for purposes of carrying out this Act for the fiscal year 1989 equal or exceed $6,000,000, the Secretary shall first make available, from such

amounts, not less than $500,000 for demonstration projects under section 231(b)(1).

(2) OTHER TITLE II ACTIVITIES.—(A) Of amounts appropriated under subsection (a) for the fiscal year 1989, the Secretary shall first make available not more than $250,000 for purposes of carrying out part A.

(B) Subject to subparagraph (A), of amounts appropriated under subsection (a) for any fiscal year, the Secretary shall first make available, in order of priority—

(i) not more than $750,000 for purposes of carrying out section 212; and

(ii) such sums as may be necessary for purposes of carrying out section 211.

II. SUMMARY OF THE BILL

The Technology-Related Assistance for Individuals With Disabilities Act of 1988 has two titles. Title I establishes a competitive grant program designed to assist each participating State develop and implement a consumer-responsive statewide program of technology-related assistance for individuals with disabilities.

Under title I up to 10 States may enter the first year, 20 additional States the second year, and the remaining States the third year. A State that competes successfully receives a 3-year grant, and then must submit another application for two more years of funding, for a total of 5 years. Funding per State is $500,000 to $1,000,000 in years 1 and 2 and $500,000 to $1,500,000 in years 3, 4, and 5. Title I also authorizes the Secretary of Education to provide the States with technical assistance.

It is anticipated that title I grants will serve as a catalyst for States to (1) comprehensively and systematically review current policies, practices, and procedures used by public and private entities relating to the provision of and payment for assistive technology devices and services; and (2) develop and implement comprehensive strategies for expanding and improving opportunities for individuals of varying ages and types of disabilities across all major life activities to obtain high quality assistive technology devices and services and other forms of technology-related assistance.

States are given considerable discretion in setting up statewide programs, although specific suggestions are included in the legislation. In developing and implementing a statewide program, a State may elect to accomplish the purposes described above through such functions as: indentification of needs and evaluation, provision of assistive technology devices and services, dissemination of information, training and technical assistance, a public awareness program, assistance to community-based organizations, partnerships and cooperative initiatives, collection of program data, and procedures for involvement of concerned individuals.

Suggested uses of funds to carry out the purposes of the grant include, but are not limited to—using funds for model delivery systems, a statewide needs assessment, public awareness programs, training and technical assistance, as information system, and interstate agreements.

The authorization of appropriations for Title I in FY1989 is $9,000,000, and such sums as may be necessary in the four succeeding years.

Title II authorizes a variety of discretionary activities and studies, including a study of the financing of assistive technology and services and a study of the feasibility and desirability of establishing a national information and programmatic referral network on technology-related assistance. It also supports training and public awareness grants to increase the knowledge and effective use of assistive technology devices and services; and funds demonstration and innovation projects related to model projects for delivery of assistive technology devices and services, applied research and development in assistive technology devices and services, and a loan program for assistive technology services.

The bill authorizes to be appropriated for title II (except the model projects for delivery of technology-related assistance) $5,000,000 for FY1989 and such sums as may be necessary for the four succeeding years. The bill authorizes to be appropriated for the model projects for the delivery of assistive technology devices and services $1,500,000 for FY1989 and such sums as may be necessary for the four succeeding fiscal years.

III. Background and Need for the Legislation

In 1980, the Senate Committee on Labor and Human Resources asked the Office of Technology Assessment (OTA) to take a comprehensive look at the role played by technology in enhancing opportunities for persons with disabilities. One purpose of the assessment was to examine the policies and specific processes through which technologies are developed, evaluated, diffused, delivered, and used. A second purpose was to examine the broader issues related to providing an appropriate fiscal and technical fit between technologies and users.

In 1982, OTA submitted its final report to Congress. In the forward to the report, *Technology and Handicapped People* (May 1982), John H. Gibbons, the Director of OTA, recognized the powerful role technology plays in enhancing opportunities for individuals of varying ages and types of disabilities across all programs and major life activities, including early intervention, education, rehabilitation and training, employment, residential living, independent living, and recreation.

> "Technology exerts a powerful influence over the lives of everyone, making life easier, more fulfilling, but sometimes more painful and frustrating. This statement is especially true for people with disabilities. The appropriate application of technologies to diminishing the limitations and extending the capacities of disabled and handicapped persons is one of the prime social and economic goals of public policy."

One of OTA'a most significant conclusions was that State and Federal involvement lacks a comprehensive, responsive, and coordinated mechanism to administer existng laws in the disability area.

> "The volume, diversity, and often contradictory goals of many of the initiatives have tended to produce an administrative 'gridlock,' where movement of any kind, in any direction,

is increasingly difficult. Other byproducts of this Federal-State blend of intervention and action are inconsistent definitions of 'disability' in the law and confusing payment or jurisdictional problems resulting from the definitional issues." (p. 4)

Since the 1982 Report, technology has received greater recognition by policymakers and public and private agencies providing services to persons with disabilities. For example, recent amendments to the Rehabilitation Act of 1973 (P.L. 99-506), the Education of the Handicapped Act (P.L. 99-457), the Developmental Disabilities Assistance and Bill of Rights Act (P.L. 100-146), and the Older Americans Act (P.L. 100-175) recognize the role technology can play in enhancing opportunities for individuals with disabilities. Across the nation, human service agencies are beginning to develop projects to make assistive technology devices and services available for individuals with disabilities.

Notwithstanding the growing recognition of the benefits of technology for individuals with disabilities and the isolated development of effective projects, there has been little, if any, progress in addressing the fundamental concerns expressed in OTA's 1982 report. Today the provision of technology to individuals with disabilities is still characterized by fragmented service delivery systems in which the purchase of technology; the delivery of technology; the training of individuals with disabilities, members of such individuals' families, and persons who work with such individuals; and the provision of information about technology, are still not integrated into a mutually reinforcing and complimentary whole. Instead, an inefficient, uncoordinated approach to the provision of technology still exists.

Currently, there is no Federal legislation that facilitates the development and implementation of comprehensive approaches at the Federal and State levels that enhance utilization of technology-related assistance for individuals with disabilities. Thus, there is a need for Federal legislation that stimulates State efforts designed to integrate disparate efforts and that provides an opportunity for States to undertake systematic initiatives to work across traditional agency boundaries in filling gaps, and in developing and implementing consumer-responsive statewide programs of technology-related assistance. There is also a need to identify Federal policies that facilitate and impede the provision of and payment for assistive technology devices and services, and a need for the Federal government to provide technical assistance and other national initiatives that support statewide initiatives.

IV. Hearings

WITNESSES TESTIFYING AT THE HEARINGS

The Subcommittee on the Handicapped held hearings on May 19 and 20, 1988 to consider legislation establishing a program of grants to States to promote the provision of technology-related assistance to individuals with disabilities and to enhance the Federal Government's role in providing and making available such assistance.

The first witness at the hearing was Senator John Kerry of Massachusetts. Senator Kerry testified on the critical role technology can play in enhancing opportunities for severely handicapped children, and on his bill S. 1586, which provides financial assistance under the Education of the Handicapped Act to improve the educational opportunities of severely handicapped infants, children, and youth, through the use of assistive device resource centers.

The second witness, Teddy Pendergrass, testified on the role that assistive technology has played in making it possible for him to continue his career as a singer, songwriter, and record producer after a disabling accident. Mr. Pendergrass was accompanied by Mr. John Hartman, Manager.

Following Mr. Pendergrass was a panel consisting of Leo Lucas, Dr. Al Cavalier, Carolyn Rossick, and John C. De Witt. This panel discussed the efficacy of technology for persons with different types of diabilities.

Mr. Leo Lucas of Boston, Massachussetts, spoke on behalf of United Cerebral Palsy Associations, Inc. and described his own experiences in obtaining access to an augmentative communication device which enabled him to attend college. Dr. Al Cavalier, Director of the Bioengineering Program, Department of Research and Program Services, Association for Retarded Citizens of the United States in Arlington, Texas, testified on behalf of the Association on the potential uses of assistive technology by persons with cognitive impairments. Carolyn Rossick testified on behalf of Howard "Rocky" Stone, Sr., founder and Director of Self Help for Hard of Hearing People, Inc., an advocacy and information organization for hard of hearing people, their relatives and friends. Mr. John C. De Witt, Evaluation Coordinator with the National Technology Center of the American Foundation for the Blind, testified on behalf of the Foundation on the uses of assistive technology by persons with visual impairments.

The last panel of the day presented information on service delivery systems for assistive technology. The witnesses were: Dr. Marvin Fifield, Rachel Wobshall, Brian McNulty, and Peter Howell.

Dr. Marvin Fifield, Director of the Utah State University Affiliated Developmental Center for Handicapped Persons, discussed personnel training issues within existing public and private service delivery systems. Rachel Wobschall, Director of the Governor's Initiative on Technology for People with Disabilities in Minnesota, discussd the coordination of services at the State level. Brian McNulty, Executive Director of Special Education with the Colorado Department of Education testifying on behalf of the National Association of State Directors of Special Education, discussed the implications of a statewide program of technology-related assistance for school-aged children. Peter Howell, Director of Program Evaluation with the South Carolina Vocational Rehabilitation Department testified on behalf of Joe Dusenbury, Commissioner, South Carolina Vocational Rehabilitation Department. Mr. Howell discussed the role of the vocational rehabilitation system in the distribution of assistive technology.

The first panel on the second day of hearings addressed how assistive technology can enhance functioning in different life activi-

ties. The panel consisted of Sally deVincentis, Dr. Herb Rieth, Denny Theesfield, and Tom O'Bryant.

Ms. Sally deVincentis, Executive Director of the National Lekotek Center in Evanston, Illinois, discussed the role of assistive technology in early education and the role of parents in the service delivery system. Dr. Herb Rieth, Professor and Chair of the Special Education Department at Vanderbilt University in Nashville, Tennessee, testified on behalf of the Council for exceptional Children and its Technology and Media Division. He discussed the role of assistive technology in enhancing learning in special education. Mr. Denny Theesfield, a farmer with a disability from Armstrong, Iowa, testified on behalf of the Easter Seal Society of Iowa's Farm Family Rehabilitation Management Program on the role of assistive technology in enhancing employment opportunities, particularly for farmers. Mr. Tom O'Bryant, Director of Equal Opportunity Affairs with the Champion International Corporation, testified on behalf of the President's Committee on Employment of the Handicapped. Mr. O'Bryant discussed the role of assistive technology in enhancing employment opportunities.

The second group of panelists discussed the funding, reimbursement, and costs and benefits of assistive devices. The panel consisted of Barbara Boardman, M.D.; Dr. Steven White; and Mary Pat Radabaugh.

Dr. Barbara Boardman, a senior analyst with the Office of Technology Assessment, testified on the costs and benefits of assistive technology. Dr. Steven White, Director of the Reimbursement Policy Division of the Governmental Affairs Department of the American Speech-Language-Hearing Association, testified on Federal reimbursement and tax issues. Ms. Mary Pat Radabaugh, Manager of the IBM National Support Center for Persons with Disabilities, presented testimony on private sector initiatives to provide assistive technology.

The third and final panel consisted of Dr. Larry Scadden, Director of the Rehabilitation and Engineering Center of the Electronic Industries Foundation and Staff Director for the Assistive Devices Division of the Electronic Industries Association. Dr. Scadden presented information on research and development of assistive technology, and addressed the special concerns of small businesses involved in developing assistive technology.

ISSUES RAISED AT THE HEARINGS

The testimony provided during the hearings and for the record revealed a number of issues for consideration in developing the legislation.

Role of Technology and Who It Benefits

The witnesses emphasized the important role that technology can play in the lives of individuals of varying ages and types of disabilities across all major life activities, and that the possibilities for using assistive technology to change the lives of people with disabilities are immense. According to Rachel Wobschall, technology is an equalizer that offers the means to compensate for limitations imposed by a variety of disabilities and is a tool that can be used in

all areas of life. She further stated that, as a tool, technology needs to be integrated into all areas of service delivery.

Denny Theesfield, an Iowa farmer who became disabled after receiving injuries in Vietnam, described the role of technology in enabling him to continue farming. As Mr. Theesfied testified, after he was injured he thought he ". . . could never farm again. So I had a farm sale and sold all of my machinery. Then my uncle and cousin built a lift to get me on and off tractors. It was this homemade device that allowed me to start farming again." He added that assistive technology can play a major role in relieving the pressures of dependence that a person with a disability may experience by promoting maximum self-sufficiency.

Teddy Pendergrass, a singer, songwriter, and record producer described his musical comeback after an auto accident left him quadriplegic. With the aid of simple modifications developed by a rehabilitation engineer, Mr. Pendergrass is now able to utilize sophisticated electronic musical technology. As Mr. Pendergrass stated, with these modifications he is now "able to compete on an equal basis with any musician who makes his living in the music business. When it comes to my music, my disability is not important."

Leo Lucas, who has cerebral palsy and is a user of an augmentative communication device, asserted that while "technology for some people is a luxury, for non-speaking people like me, it is the means to a meaningful life." He emphasized this point by describing his own experiences in obtaining an electronic communication system. As a child, he did not attend regular school because of his disability, and received about five hundred hours of home tutoring instead. Today, he is attending Northeastern University at the age of 45.

Dr. Al Cavalier testified that "hidden capabilities can be unmasked and new skills developed" with the aid of assistive technology. He further explained the special role that assistive technology can play in enhancing the lives of persons with cognitive impairments, such as mental retardation. For example, assistive technology can be used to reduce confusion; provide straightforward or simpler modes of operation; improve problem-solving strategies; and enable this population to make important choices for themselves and exercise control over important aspects of their lives. Dr. Cavalier then described the use of technology that links a computer cable of voice recognition with such items as televisions, electric fans, radios, and other such devices, that allows a person with a cognitive impairment to have freedom of choice and control over these significant aspects of their environment. He also described a new assistive technology device that promots independence in toileting by monitoring the bladder and providing a subtle signal to the wearer when the bladder needs to be emptied.

Witnesses further testified that assistive technology can allow many individuals with severe disabilities to have greater control over their lives and interact with nondisabled individuals in a variety of settings. Assistive technology allows these individuals to be educated with their non-disabled peers, work in diverse business settings, and live independently in the community. Brian McNulty stated that "technology offers the promise of greater integration and development of a social network by providing physical and

communicative access to individuals who would otherwise remain on the outside of society looking in."

As Dr. Al Cavalier stated in his testimony, "when such assistance is needed, it should be integrated throughout all relevant areas of their functioning, and throughout their lifetime." Other witnesses gave specific examples of how individuals of different ages and with different types of disabilities can benefit from assistive technology in various settings. For example, John C. De Witt explained that adaptive technology has significant impact on the employability of blind and visually impaired persons. Sally deVincentis reported on the efforts of Lekotek programs to use adapted toys and other assistive technology with children with disabilities and their families. Dr. Herb Rieth testified on the benefits of assistive technology for children with cognitive or other handicaps. According to Carolyn Rossick, testifying on behalf of Rocky Stone, assistive technology also has tremendous capabilities to improve the lives of persons with hearing impairments, and to permit them access to the greater community.

Types of Technology Available

Witnesses reported that there already exist a substantial number of assistive technology devices that can significantly benefit individuals of all ages who have disabilities; however, transfer to the special, long-term needs of persons with disabilities has been slow, sporadic and uneven. Same witnesses delivered their testimony using assistive technology. For example, because he is unable to speak clearly, Leo Lucas used a computerized communication board to deliver his testimony. Dr. Larry Scadden, who is blind, demonstrated a Kurzweil reader, a device which "read" a portion of his written testimony and delivered it verbally. Carrolyn Rossick, who is hearing impaired, relied on an augmentative hearing device while providing her testimony.

Additional examples of assistive technology were seen by the Subcommittee during a demonstration of assistive technology that was held in conjunction with the hearings. A wide range of assistive devices were presented at the demonstration, from toys with adapted switches that could be used easily by children with disabilities and simple household gadgets that had been modified to be used by people with mobility impairments, to a variety of sophisticated wheelchairs. There was also a full range of computer-based assistive technology, such as computers with enhanced images that could be read by people with visual impairments, and computers that could "understand" and translate voice input into written (or the reverse) for people with speech or hearing impairments.

Cost-Benefits

According to Larry Scadden, the Federal Government spends an estimated $60 billion annually in this country to maintain people with disabilities. According to Dr. Barbara Boardman of the Office of Technology Assistance, that figure doubles when State and private disability programs are included. Dr. Marvin Fifield estimated that there are 25 to 45 million people with disabilities who could benefit from the use of assistive technology. The witnesses agreed that there are cost benefits to providing assistive technology de-

vices to many of these individuals. As stated in testimony submitted by Madeleine Will, Assistant Secretary of Special Education and Rehabilitative Services for the U.S. Department of Education, "many disabled persons can benefit greatly from simple, straightforward, often inexpensive equipment or modifications to their personal environment or worksites."

Dr. Boardman estimated that the costs to the Federal Government of disability expenditures, resulting from the unemployment of individuals with disabilities who could be employed if they received technology, range from $100 million to $1 billion. According to Tom O'Bryant, "because of technology . . . individuals with very severe disabilities, many of whom have been considered to be unemployable, are now able to obtain employment and to succeed as valuable, contributing employees." He then gave several examples of how assistive technology, from simple adaptations to sophisticated devices, have helped individuals with handicaps remain employed. Dr. Larry Scadden agreed that assistive technology is definitely cost-effective in the employment area. Dr. Steven White added that the elderly, while they are unlikely to enter the workforce with the aid of assistive technology, will less frequently need costly long-term care. And Senator John Kerry, in his testimony describing assistive technology resource centers in Massachusetts, reported that they have been cost-effective in providing assistive technology devices and services to children with handicaps.

With respect to the costs of technological devices and workplace adaptation, Rachel Wobschall said in her testimony that while these devices and modifications can be very expensive, companies are finding that these expenditures are often far outweighed by the cost of long-term disability payments. Brian McNulty stated that the actual costs of technology, in all areas, are likely to decrease in the future with further advances in the areas of electronics and computerization, as well as with the expansion of markets.

Barriers Limiting Access to Assistive Technology

While witnesses were universal in their beliefs that many individuals with disabilities can benefit from assistive technology devices and services, they also agreed that many individuals with disabilities do not have access to this technology. Witnesses reported a number of important barriers to the dissemination of needed assistive technology to persons with handicaps.

Lack of Funding. Several witnesses emphasized that the most significant barrier to gaining access to assistive technology devices and services is lack of funding. For many persons with disabilities, the burden of paying for often costly assistive technology falls on them and their families. Persons with disabilities are often the least able to afford such devices. According to Dr. Barbara Boardman, people with disabilities are disproportionately represented in low-income groups. For example, in 1984, twice the percentage of persons with disabilities reported household incomes under $15,000 compared to other Americans (50% versus 25%). Other data indicate that income decreases as the disability becomes more severe. According to Dr. James Hardy, Director of Professional Services for the Division of Developmental Disabilities at the University of Iowa Hospital School, the personal financial burdens are often

worse for persons with disabilities who are gainfully employed. Because they do not receive entitlement benefits, they "often find the costs of medical care, assistive devices, and attendant care to be staggering."

Rachel Wobschall pointed out that people with disabilities are often denied payment under Federal health insurance programs because these programs were designed to provide assistance for acute medical problems rather than for chronic problems faced by people with disabilities. Dr. Steven White further reported that "although there are many Federal resources to pay for assistive technology, they are not coordinated in any way nor do they have consistent eligibility requirements." He further stated that while private insurance plans do not explicitly include or exclude coverage of assistive technology in their benefits, they usually deny these claims. He added that "reimbursement systems available for assistive technology have not pace with the technology," and that the major problem related to reimbursement of assistive technology is that "no one wants to take responsibility for paying for technology." Dr. Al Cavalier asserted that in order to realize the powerful benefits of technology, larger budgets must be committed for Federal projects in this area. As Dr. Steven White said, "action must be taken to clarify and simplify the financing system and to ensure that someone in the public or private sector is the payor of first resort, not the last."

It was reported by Danny Theesfield that funding for assistive technology and related service delivery is extremely scarce in rural areas. He added that the cost of rural independent living aids, equipment adaptations, and agricultural work-site modifications are primarily paid for by persons with disabilities and their families.

Lack of Trained Personnel. Another key problem identified by witnesses is the lack of trained personnel to deliver assistive technology services. Several witnesses testified that a major barrier to getting access to assistive technology has to do with the lack of professional preparation, both preservice and inservice. According to Rachel Wobschall, providing technology for individuals with disabilities is a unique combination of products, services, training and evaluation, and thus requires expertise across a broad range of areas. Peter Howell added that the key to effective assistive technology services "is the delivery of such by personnel who have the expertise, sensitivity for persons' limitations, and informed and updated knowledge base to effectively marshall available and adapted technology toward practical solutions of limitation deficits." Dr. Al Cavalier asserted that a critical factor in an effective community service delivery system that includes technology assistance is the delivery of services by adequately trained professionals and paraprofessionals—including training in assessment, prescription of an appropriate device, and evaluation of continued appropriateness. However, as Dr. Marvin Fifield pointed out, there is a shortage of professionals in key disciplines. Brian McNulty asserted that "because adaptive and assistive technologies and services needed to benefit from them are rarely, if ever, addressed in personnel preparation training programs, even recent graduates are unprepared to address the technology needs of their clients."

Dr. Marvin Fifield noted that a Federal manpower training effort is needed to address this problem. According to Dr. Fifield, "without the upgrading of knowledge and skills of primary providers about assistive technology, our efforts will continue to be fragmented and available only to consumers who are persistent enough or sufficiently knowledgeable to circumvent the more traditional service system."

Lack of Information. Witnesses reported that there is a lack of available information about the potential of technology, and that awareness and dissemination of information on the availability of assistive technology is not coordinated. Witnesses agreed that it is critical that this information be available not only to the consumer of the assistive technology device and services, but to their families or representatives, people who work for public or private entities that have contact with individuals with disabilities, employers, and others. For example, Tom O'Bryant pointed out that small employers generally are not aware of the programs and services available to individuals with disabilities, or of the devices and accommodations that enable them to compete and perform in the job setting. He suggested that professional or trade organizations be targeted for sharing information with small businesses. Mary Pat Radabaugh described IBM's Executive Awareness Program which travels around the country to provide informational seminars on what technology can do and where to get information for educators, rehabilitation professionals, leaders in the public sector, IBM's customers, and the press. IBM reports that there is great demand for this information.

Larry Scadden identified the insurance industry as another important target of public education efforts. He added that claims adjusters are often "the brokers who stand between the person with the disability and assistive technology that will provide increased independence and productivity." Dr. Steven White agreed, adding that training of insurance claims adjusters should start at the top with the claims managers.

Lack of Coordination Among Programs. Witnessess agreed that the current lack of coordination among most existing State human services programs, and among these programs and private agencies, is a significant barrier to the development of comprehensive programs of technology-related assistance. According to Madeleine Will, Assistant Secretary for Special Education and Rehabiliative Services with the U.S. Department of Education, "a very inefficient, uncoordinated approach to the provision of technology exists." Dr. Marvin Fifield further reported that current law does not facilitate a comprehensive approach at either the Federal or State levels for the utilization of assistive technology.

Brian McNulty testified that it is essential that we work toward the development of an integrated program of service delivery across agencies. Witnesses believed this coordination between programs to be particularly crucial when individuals with disabilities make transitions between programs; for example when a young adult leaves the education system and begins receiving vocational rehabilitation services. According to witnesses, the need for technology does not significantly change as a person engages in different activities, such as school, work, or independent living. As Dr. Herb Rieth testified, technology must be as transportable as possi-

ble "so that persons can use it in as many situations as their life demands." Dr. Barbara Boardman emphasized that a rational delivery system must address this issue of coordination of care between various disability support systems.

Dr. John De Witt also identified the important need for coordination *between* States as well as within States. Individuals with handicaps often have to "start all over again" in their efforts to receive devices and services if they move from one State to another.

Lack of Public/Private Sector Coordination. Coordination between the public and private sectors was also seen as critical by witnesses. Dr. Al Cavalier reported that to date, the private sector has been primarily responsible for the few innovations in devices, techniques, and services that are currently available. Leo Lucas, speaking on behalf of the United Cerebral Palsy Associations, Inc., recommended the establishment of a new demontration program to encourage public/private partnerships in assistive technology services. Peter O'Bryant pointed out that with labor supply shortages, people with disabilities are now being aggressively sought out for employment. Thus, the private sector has a new interest in the vocational needs of persons with disabilities. According to Leo Lucas, "a major problem that now exists is a persistent and ever growing gap between product development and product delivery; the weakest link being the absence of an integrated system of efficient service delivery that joins consumers and professionals to available and developing assistive device technologies."

Small Market. According to witnesses, because of limited commercial markets, there is a lack of incentives for the private sector to become involved in the development and distribution of technology devices to meet the needs of individuals with disabilities. Testimony submitted by the Council on Engineering of the American Society of Mechanical Engineers suggested that "improving the mechanisms to select and deliver assistive technology devices will not only expand the availability and use of existing technologies, but help to define the market for new technologies." According to Dr. Larry Scadden, when a financially-based market demand exists, industry will provide quality assistive technology and devices for people with disabilities. Peter Howell added that "the marketplace wants to participate in any expansion and enhancement of assistive technologies, but they must be invited and then directed." Dr. Al Cavalier suggested that assistive devices can be designed flexibly to address a much larger population, thereby enhancing their survival in the marketplace. As he said, "we need to look at the functional need rather then the label of the handicapping condition."

Lack of Capacity. Finally, witnesses reported that most State systems simply lack the capacity to provide the necessary technology-related assistance. As Dr. Marvin Fifield testified, "we do not have the means to carry out the planning, the coordination, the development, or the marketing, or even the training, to utilize technology effectively." RESNA, the Association for the Advancement of Rehabilitation Technology, added in their submitted testimony that "there is urgent need for the capacity to plan and implement coordinated assistive technology delivery and payment systems that

can surmount the barriers imposed by previous legislation and lead to the availability of quality technological assistance."

Service Gaps at the Federal Level

Witnesses also identified service gaps at the Federal level. Madeleine Will, Assistant Secretary of Special Education and Rehabilitative Services with the U.S. Department of Education, stated that "The provision of technology to persons with handicaps is currently characterized by a fragmented service delivery system in which the purchase of technology, the delivery of technology, and information about technology are not integrated into a mutually reinforcing and complementary whole." Other witnesses agreed that there is a lack of coordination among agencies that provide or pay for the provision of assistive technology devices and assistive technology services. For example, Dr. Steven White reported that "Federal resources are not coordinated in any way nor do they have consistent eligibility requirements."

Witnesses also cited the need for the Federal Government to provide better assistance and information with respect to use of assistive technology devices and the provision of assistive technology services. According to Peter Howell, there is a need for the Federal Government "to enhance linkages and expand upon the networks that already exist to provide the broadest and most effective dissemination of information." Dr. Marvin Fifield testified that a Federal clearinghouse function is needed to bring together information about available assistive technology, and Dr. Herb Rieth suggested that the Federal Government monitor and coordinate common features among States to avoid duplication of efforts.

Definitions

Witnesses believed that "persons with disabilities" should be defined broadly. As witnesses testified, the term should apply to persons with cognitive impairments, such as mental retardation or learning disabilities; as well as to people with sensory impairments, such as blindness or deafness; speech impairments; and physical and multiple impairments such as cerebral palsy. They emphasized the need for flexibility in determining what types of impairments should be considered disabilities.

Witnesses also reported that the definitions used to describe assistive technology devices and services in legislation should be broad and flexible. In discussing what types of activities should be included in assistive technology service, witnesses included the need to train individual consumers to make them more effective in choosing and utilizing assistive technology. According to Dr. Marvin Fifield, many technological aids cannot be placed effectively without appropriate therapy and training, including follow-up with technical assistance. Dr. Al Cavalier also testified that the provision of follow-up support after a consumer has purchased an assistive device and has been using it for some time is critical. As Teddy Pendergrass said, "we need to be constantly . . . trained and retained so that we can compete in industry at the same level with anyone else." Witnesses stated that this follow-up support must include ensuring that the individual with a disability is appropriately

and effectively using the assistive technology device, and that the device is maintained and repaired or replaced when necessary.

John De Witt continued by saying that an adaptive techology system should encompass "support for development of new technologies, evaluation of existing products, information dissemination to consumers and professionals in accessible media, assessment of individuals' needs, and financial assistance." Throughout their testimony, witnesses emphasized the importance of evaluating individuals with disabilities for their need for assistive technology, and the need for trained professionals to both conduct those evaluations and select appropriate devices. According to witnesses, selecting an appropriate device can include adapting existing technology or off-the-shelf devices, customizing devices, or even designing new technologies that respond to the individual needs of the consumer in the different environments and settings in which they function. They also cited the need for mechanisms to acquire devices as a critical part of assistive technology service, noting the substantial financial barriers that persons with disabilities encounter in obtaining devices. Finally, they described the importance of coordinated systems of care for providing assistive technology service.

STRUCTURE OF PROGRAM OF ASSISTANCE TO STATES

Several witnesses recommended that legislation assist States to develop and implement programs of technology-related assistance that are: 1) consumer-responsible; 2) comprehensive; and, 3) statewide, and that States should be provided flexibility in developing these programs.

Leo Lucas, testifying on behalf of United Cerebral Palsy Associations, Inc., recommended the establishment of an "incentive grant program to assist States in building their capacities to deliver assistive technology services in the home, the classroom, and the workplace." It was suggested that competitive grants be provided to States for planning and developing comprehensive statewide systems of assistive technology services. Other witnesses emphasized that the long-term strategy should be to include all States in the program, and cautioned against "widening the gap" between States that are currently providing higher levels of services and have more sophisticated deliver systems, and those that do not.

Consumer-Responsive

Witnesses recommended that consumers have input into the development and ongoing functioning of a statewide program of technology-related assistance. Dr. Herb Rieth testified that "consumers should be members of advisory councils and in other leadership and decision-making roles pertaining to the provision of technology assistance." Rachel Wobschall further recommended that consumers be included in State advisory councils.

The importance of consumer involvement in the provision of technology-related services was seen as critical by witnesses. Teddy Pendergrass related the vital role he played in acquiring needed assistive technology devices and services when he said "we worked together as a team to choose the equipment, the software, and the overall approach. Throughout this process, I have felt that my

input was important. I had the power to veto ideas, and I sometimes did. My ideas are included in the training approach, the short-term and long-term goals, and every other aspect of this project.

Statewide and Comprehensive Approach

Witnesses identified several important functions which should be addressed in developing and implementing statewide programs of technology-related assistance, and suggested activities that may be carried out to fulfill those functions.

One function is the identification of individuals with disabilities and an assessment of their needs for technology-related assistance. This information provides an important basis for identifying the focus for services. John De Witt pointed out that the scarcity of reliable data concerning disability in this country is an ongoing problem. Dr. Al Cavalier noted that demographic studies should be supported to gather accurate information on the nature and extent of the existing and future market for assistive devices and services.

Another function which witnesses suggested that States should undertake is to identify and coordinate State policies, resources, and services relating to the provision of assistive technology devices and services to individuals with disabilities. Witnesses clearly identified the lack of coordination between the various programs and agencies that provide services to persons with disabilities as a significant barrier to acquiring these devices and services.

Witnesses noted that the lack of financing mechanisms is a critical barrier in obtaining assistive technology devices, and that nobody is willing to take responsibility for funding. Therefore, they suggested that States be authorized through the legislation to actually fund the provision of assistive technology devices and services. A number of suggestions were made in testimony for funding devices. Several witnesses recommended that Medicaid and Medicare options be examined. Dr. Steven White noted that in many States, such as Iowa, Medicaid will pay for assistive technology to individuals under the age of 21. Mary Pat Radabaugh also suggested that expanding Medicaid to include technology would make assistive devices more broadly affordable.

Witnesses identified lack of information about devices and services as another barrier for persons with disabilities. Therefore, it was suggested that States may wish to develop and implement mechanisms for disseminating information related to technology-related assistance and sources of funding for assistive technology devices and services. Another suggestion was for States to undertake a public awareness program on the efficacy and availability of assistive technology devices and services. Witnesses offered a number of suggestions for ways of providing information. Sally deVincentis recommended a network of Assistive Technology Centers that would include a major distribution center in each State that would make available equipment, information, and training; and community based consumer-oriented technological centers that would be responsive to local and regional needs. Mary Pat Radabaugh suggested that information programs be tied into resource/demonstration centers where people could go to "see, feel, and work directly with assistive technology devices." Dr. Al Cavalier agreed that the

provision of sustained interaction between the consumer and the device prior to purchase is critical, for example at centralized sites where technology can be "tried out." When providing information, witnesses agreed that it is imperative to consider the special needs of consumers with disabilities to ensure that the information is in a format accessible to them. For example, information might be provided to a person with visual impairments either orally (such as on a cassette tape), in enlarged print text, or in Braille, rather than in regular printed format.

Another important barrier to service identified by witnesses was the lack of training and technical assistance. Therefore, it was suggested that States provide this training and technical assistance to individuals with disabilities and others. As witnesses attested, there is a lack of training for individuals with disabilities who use assistive technology, their families or representatives, employers, teachers, and other people who have contact with individuals with disabilities. Dr. Marvin Fifield suggested that well-designed self-instructional programs might be a particularly useful strategy for training.

Witnesses suggested that another activity that should be undertaken by States would be to establish or support partnerships and cooperative initiatives between the private and public sectors. While a wide range of services is generally available through State programs and agencies, witnesses identified substantial private sector and community efforts to provide assistive technology devices and services to individuals with disabilities, and emphasized the importance of these linkages. For example, Sally deVincentis described the efforts of Lekotek to provide services to children with disabilities and their families. Mary Pat Radabaugh presented testimony on the efforts of IBM to provide computer technology and training through their National Support Center for Persons with Disabilities, as well as their efforts to make the purchase of computers more accessible to persons with disabilities through an agreement with National Easter Seal Society. Apple Computers submitted testimony describing their national network of 23 National Special Education Alliance community-based resource centers designed to help individuals with disabilities benefit from computer-based technology-related assistance in school, at home, on the job, and in the community. And Tom O'Bryant emphasized the importance of coordination with the private sector to enhance the employability and employment opportunities of persons with disabilities.

Related to the issue of training of qualified personnel is the development and application of standards. As John De Witt testified, "professional certification in the field of adaptive technology is necessary, but . . . development of appropriate standards will be a complex task." Therefore, witnessed suggested that States could take actions to develop and/or apply existing standards to help ensure the availability of qualified personnel. Testimony submitted by RESNA, the Association for the Advancement of Rehabilitation Technology, particularly emphasized the need for quality assurance, including personnel certification. They stressed that quality assurance mechanisms are intrinsically tied to third party reimbursement.

Another function which witnesses suggested States address is increasing the involvement of concerned individuals in decisions relating to the development and implementation of a program of assistive technology devices and services. As Teddy Pendergrass pointed out during his testimony, the involvement of the consumer of the assistive technology device can be critical for insuring appropriate service. Other witnesses identified the importance of other concerned individuals, such as families, employers, teachers, and other professionals in this process.

State Flexibility

As Dr. Marvin Fifield reported, States "differ in their resources, in their sophistication and certainly, the State delivery systems and the organization within the States differ." Consequently, witnesses felt strongly that States should have substantial flexibility in establishing these statewide programs. Brian McNulty recommended that legislation define the desire outcomes, and then let the States "develop, implement, and evaluate the methodologies and strategies for addressing these outcomes." Dr. Herb Rieth felt that while legislation should contain minimum criteria, it is "essential that the criteria be sufficiently flexible to accommodate variation among programs and services offered by different States." And Rachel Wobschall said that an important feature of this legislation is that "it allows each State to capitalize on its own unique strengths."

There were no consensus among witnesses as to where these programs and services should be based in the State Governmental structure. Some witnesses felt that the legislation should designate a lead agency. For example, Peter Howell recommended that the Department of Vocational Rehabilitation should be designated as a lead agency. Brian McNulty suggested, however, that the program be placed within the Governor's office, after which the State could be provided with maximum flexibility as to how to implement the program. He added that "successful implementation of technology legislation may necessitate the development of new organizational collaboratives within each State, and States should be allowed to and encouraged to develop their own unique and viable interagency approaches."

PROGRAMS OF NATIONAL SIGNIFICANCE

Evaluation of Financing of Assistive Technology Services and Devices

Several witnesses indicated the need for a national study to examine policies that impede the funding and acquisition of assistive technology devices and services. Testimony on behalf of United Cerebral Palsy Associations, Inc. urged that Federal funding policies be reviewed to identify those that impede the delivery of assistive technology devices and services. Dr. Steven White also suggested that a Commission be established to study issues related to funding of assistive technology.

Witnesses indicated that there are a number of Federal and State laws, regulations, procedures and practices that may act to impede the development of technology and the acquisition of tech-

nology be consumers with disabilities. In particular, witnesses identified funding barriers to the acquisition of assistive technology devices. Dr. Steven White asserted that in order to ensure that assistive technology, inequities in Medicare and Medicaid coverage must be resolved. For example, he said, if a Medicare beneficiary needs a cochlear implant, reimbursement will be provided for the surgery and the device; but reimbursement will not cover a hearing aid which would cost considerably less. With Medicaid, Dr. White added, States have the option of paying for assistive technology devices and services, and some do provide limited coverage. For example, in Iowa, Medicaid will pay for augmentative communication devices. Nonetheless, coverage across States is not consistent. Dr. White also noted that there are disincentives for Social Security Income recipients to save money and purchase assistive technology devices.

Witnesses also identified important incentives and disincentives in the tax code related to the acquisition of assistive technology. Dr. Larry Scadden affirmed that the Federal tax code should continue to provide tax deductions to people with disabilities for the purchase or lease of technology used in employment. He added that tax considerations should be provided to employers who purchase or lease assistive technology for employees with disabilities. Dr. Steven White also recommended that the tax code be amended "to provide tax credits, tax deductions, accelerated write-offs, or other incentives that could be used by individuals who purchase assistive technology."

Witnesses suggested several alternative strategies for acquiring or paying for assistive technology devices and services. For example, Dr. Steven White suggested that the Social Security Income program policies be amended to allow individuals to accumulate assets to pay for assistive technology, and that Medicare and Medicaid programs be amended so that prosthetics are considered to include assistive technology, such as augmentative communication devices and hearing aids.

A number of incentives for the private sector were also identified. Mary Pat Radabugh suggested that the $35,000 architectural barrier tax provision for companies that hire persons with disabilities could be expanded to include tax provisions for the cost of technology accommodations. She continued that the Government could encourage new business to enter this field or existing companies to develop new technology through tax incentives. Other witnesses encouraged the passage of S. 1806, a bill sponsored and introduced by Senator Harkin which would allow businesses to accelerate the deduction for purchase of equipment specifically designed to enhance the employability of the elderly or persons with disabilities.

Denny Theesfield noted that the fear of being sued has caused many creative individuals and manufacturers to stop designing and constructing needed assistive devices and modifications. Dr. Larry Scadden agreed that there are real concerns regarding liability, and emphasized that Federal and State Governments must find "a just balance between consumer safety concerns and company and personal expenses associated with liability coverage." In his testimony, Peter Howell emphasized that "without attempts to correct

the crucial regulatory and other disincentives such as product liability, lack of private sector research incentives, and lack of creative funding options, legislative initiatives will not have full, lasting, and meaningful impact."

Feasibility of a National Information and Program Referral Network

Witnesses also identified the lack of information about technology devices and services and the lack of a coordinated system for accessing and disseminating information as important barriers to the development of consumer responsive statewide programs of technology-related assistance. Dr. Herb Rieth suggested that one role for the Federal Government would be to coordinate and monitor common features of national scope among the States to avoid duplication of efforts. In other words, a coordinated information system at the Federal level could help States to avoid "reinventing the wheel." There were, however, differing views as to the structure of a national system. Sally deVincentis suggested national centers designated as research and development sites for new products and concepts. Brian McNulty reported that it may be appropriate to have mechanisms whereby the participating States can work with the Federal Government in identifying priorities and issues for research and development. And Dr. Al Cavalier testified that "rather than coordinate a variety of technology services that already exist in a fragmented fashion around the country, the Federal Government must assist in the creation of those services" because they do not now exist. Some witnesses favored the idea of disability-specific centers that would specialize in the technology needs of certain populations; others favored a network of regional centers that would deal with all disabilities.

Demonstration and Innovation Projects

Witnesses suggested that several types of demonstration and innovation projects related to assistive technology devices and services would be timely and appropriate.

It was suggested that funding be provided for model projects. While the development and implementation of consumer-responsive statewide systems was seen as a critical step for ensuring that the needs for technology-related assistance by persons with disabilties are met, some witnesses also saw an immediate need for funding of innovative direct service models. Senator John Kerry described the model of assistive technology resource centers which he saw as an innovative strategy for providing assistive technology for children with severe handicaps.

United Cerebral Palsy Associations, Inc. added that there is a growing recognition of alternatives to center-based delivery of technology-related assistance. They reported, for example, that in Virginia, Kansas, and New Jersey, a mix of State funds are supporting assistive technology services that use modified vans as part of mobile outreach systems to reach individuals with disabilities in the home, the classroom, and the workplace. With the equipment in the van, a traveling technology specialist is able to assess the needs of persons with disabilities for technology, and to make onsite modifications or fabrication of assistive technology. It was

suggested that States should consider the use of mobile systems in addition to the traditional center-based approach.

Witnesses also identified a need for basic research and development in the area of assistive technology. Dr. Herb Rieth testified that "research and development are essential. Legislation should enable the State and Federal Governments the authority to fund technology applications for persons with handicaps." RESNA, the Association for the Advancement of Rehabilitation Technology, reported that funding levels for rehabilitation engineering/technology research and development need to be increased, adding that an important by-product of research and development activity is the development of human resources and expertise. Sally deVincentis pointed out that there is a need for assistive technology that is developed to meet the needs of children. And Teddy Pendergrass noted the importance of designing simple modifications of standard "off-the-shelf" technology to make it accessible to persons with disabilities.

Finally, witnesses encouraged the development of innovative strategies for financing the acquisition of assistive technology devices. For example, Larry Scadden reported that many groups support the establishment of Federal guarantees of commercial loans for people with disabilities to be used for technology acquisition. He added that the "Federal Government should initially support innovative, and well-managed, private sector and State demonstration projects to study the feasibility of operating such programs." Testimony on behalf of United Cerebral Palsy Associations, Inc. further encouraged the creation of a new Federal program to assist individuals with disabilities in financing assistive devices.

V. Legislative Consideration and Votes in Committee

S. 2561 was introduced on June 23, 1988, by Senator Harkin for himself and Senators Kerry, Weicker, Kennedy, Hatch, Simon, Stafford, Adams, Cochran, Moynihan, and Riegle. Additional cosponsors include Senators Dole, Metzenbaum, Quayle, Pell, Melcher, and Durenberger. At the request of all members of the Subcommittee on the Handicapped, the bill was considered directly by the Committee on Labor and Human Resources.

In an Executive session of the Committee on Labor and Human Resources on Thursday, July 14, 1988, the motion to favorably report the bill with an amendment to the Senate was passed unanimously by voice of the Committee.

VI. Explanation of the Bill and Committee Views

Findings and Purposes

Section 2(a) of the bill contains the eight congressional findings that provide the bases for the legislation. First, Congress finds that during the past decade, there have been major advances in modern technology. Technology is now a powerful force in the lives of most residents of the United States. Second, for all individuals, technology can provide important tools for making the performance of tasks quicker and easier.

Third, for some of the more than 35 million individuals with disabilities, assistive technology is a necessity that enables them to engage in or perform many tasks. The provision of assistive technology devices and assistive technology services enables them to have greater control over their lives; participate in and contribute more fully to activities in their home, school, and work environments, and in their communities; have greater interaction with nondiabled individuals; and otherwise benefit from opportunities that are taken for granted by individuals who do not have diabilities.

Fourth, although the development of assistive technology devices is still in its early stages, there already exists a substantial number of assistive technology devices, including simple adaptations to existing equipment, that could significantly benefit individuals of all ages with disabilities in all major life activities such as early intervention, education, rehabilitation, training, employment, residential living, independent living, recreation, and other aspects of daily living.

Fifth, the use of assistive technology devices and services by individuals with disabilities can reduce the costs of disability to society, individuals with disabilities, and the families of such individuals by reducing expenditures associated with special education, rehabilitation, health care, transportation, telecommunication services, and other services required by individuals with disabilities.

Sixth, many individuals with disabilities do not have access to the assistive technology devices and assistive technology services that such individuals need to allow such individuals to function in society commensurate with their abilities. States do not have comprehensive programs for making available technology-related assistance to individuals with disabilities. There is a lack of: resources to pay for such devices and services; trained personnel to provide such devices and services; information about the potential of technology available to individuals with disabilities, their families or representatives, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers), employers, and other appropriate individuals; coordination among existing State human services programs and among such programs and private agencies, particularly with respect to transitions between such programs and agencies; and capacity of such programs to provide the necessary technology-related assistance.

Seventh, there are insufficient incentives for the commercial pursuit of the application of technology devices to meet the needs of individuals with disabilities because of limited markets.

Eighth, at the Federal level, there is lack of coordination among agencies that provide or pay for the provision of assistive technology devices and assistive technology services. Also, the Federal Government does not provide adequate assistance and information with respect to assistive technology devices and services to individuals with disabilities and other appropriate individuals.

Consistent with these findings, section 2(b) specifies the purposes of the bill. With respect to title I, which provides assistance to States to help each participating State develop a consumer-respon-

sive statewide program of technology-related assistance, seven purposes are enunciated in section 2(b)(1).

The first purpose of the title I program of assistance to States is to increase awareness of the needs of individuals with disabilities for assistive technology devices and assistive technology services. The Committee believes that an understanding of the needs of individuals of all ages with all categories of disabilities is an essential first step in the development of a statewide program.

The second purpose is to increase awareness of policies, practices, and procedures that facilitate or impede the availability or provision of assistive technology devices and assistive technology services. The Committee believes that increased awareness of policies that facilitate the availability and provision of assistive technology devices and services will have the direct effect of increasing the number of persons actually receiving such devices and services. Similarly, identifying policies that impede the availability or provision of such devices or services, followed by modifications of these policies in appropriate circumstances, will also result in greater numbers of individuals with disabilities actually receiving such devices and services.

The third purpose is to increase the availability of and funding for the provision of assistive technology devices and assistive technology services for individuals with disabilities. The Committee wishes to emphasize that this is a primary purpose of the statewide program.

The fourth purpose is to increase awareness and knowledge of the efficacy of assistive technology devices and assistive technology services among individuals with disabilities, their families or representatives, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers, primary service providers, and specialized practitioners), employers and other appropriate individuals. The Committee believes that, currently, too many decisions by or affecting individuals with disabilities are being made without considering the potential positive impact of technology. For example, many insurance adjusters are denying requests for reimbursement for assistive technology out of ignorance of the cost benefit of such devices.

The fifth purpose is to increase the capacity of public and private entities to provide assistive technology devices and assistive technology services and to pay for the provision of such devices and services. The Committee recognizes that many individuals with disabilities rely on assistance from public and private entities. It is critical that persons working for these entities are knowledgeable about the efficacy of assistive technology devices and services, are trained and qualified to provide the necessary devices and services, and have the authority to make available the necessary devices and services.

The sixth purpose is to increase coordination among State agencies and public and private entities that provide assistive technology devices and assistive technology services. The Committee believes that agencies that serve individuals with disabilities must work together to ensure quality and continuity of services. Inconsistent policies, procedures, and practices that frustrate the delivery of services should be eliminated.

The final purpose related to the title I program of assistance to States is to increase the probability that individuals of all ages with disabilities will, to the extent appropriate, be able to secure and maintain possession of assistive technology devices as they make the transition between services offered by human services agencies or between settings of daily living.

Assistive technology devices enable individuals to communicate, live, work, and recreate in a variety of new ways. When these advantages are limited to one setting, the power of the assistive technology devices is greatly diminished, both for the person and for the community. Therefore, statewide programs should recognize and address the need for assistive technology devices to be as transportable as possible so that persons can use them in as many situations as their life demands. For example, a child with cerebral palsy who is able to communicate during the school day with his or her classmates and teachers through the use of an augmentative communication device should be provided the same opportunity to communicate with members of his or her family and friends at home. Further, it is critical that when an individual moves from one human service agency that provided a device, to another agency, the individuals not be deprived of the device during the transition.

It is the Committee's intent that these seven purposes serve as the linchpins with respect to the design and implementation by the States of the statewide programs of technology-related assistance and for the review by the Secretary of applications for grants under title I.

In addition to the purposes applicable to title I of the legislation, two purposes are set out regarding the title II programs of national significance. The first purpose, set out in section 2(b)(2), is to facilitate the identification of Federal policies that facilitate payment for assistive technology devices and assistive technology services for individuals with individuals; the identification of Federal policies that impede such payment; and the elimination of inappropriate barriers to such payment.

The second purpose applicable to title II, set out in section 2(b)(3), is to enhance the ability of the Federal Government to provide States and others with technical assistance, information, and training and public awareness programs relating to the provision of assistive technology devices and assistive technology services; and to provide the funding for model demonstration and innovation projects.

Definitions

Section 3 of the bill defines the major terms used in this legislation, including individual with disabilities, assistive technology device, assistive technology service, technology-related assistance, underserved group, institution of higher education, Secretary, and State. These definitions should not be construed as expressing Congressional intent to modify or supersede definitions or policies included in other Federal statutes.

The definition of the term "individual with disabilities" includes a two-prong test. First, the individual must have a disability or

handicap as defined under any Federal law or the law of the State in which the individual resides.

Second, such an individual is one who is or would be enabled by assistive technology devices or assistive technology services to maintain a level of functioning or to achieve a greater level of functioning in any major life activity.

The Committee intentionally included in the legislation the broadest possible definition of the term to provide States with maximum flexibility. It is important to note however, that whenever this term is used in the legislation, both prongs of the definition apply.

While it is generally recognized that technology-related assistance can significantly benefit individuals with physical and sensory disabilities, the Committee recognizes the similar value of technology-related assistance to individuals with cognitive impairments. Thus, the Committee intends that children and adults with cognitive impairments shall be among the segments of the population considered eligible for assistance under the Act.

Individuals with cognitive impairments includes individuals who have conditions such as mental retardation, learning disabilities, closed head injury/traumatic brain injury, cardiovascular accident, Alzheimer's Disease/dementia, senility, and aphasia.

Section 3(1) of the bill defines the term "assistive technology device" to mean any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities. The Committee includes this broad definition to provide maximum flexibility to enable States to address the varying needs of individuals of all ages with all categories of disabilities and to make it clear that simple adaptations to equipment are included under the definition as are low and high technology items and software.

The term "assistive technology service" means any service, as defined in section 3(2), that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device. The term includes, but is not limited to the six categories of services specified in section 3(2). First, the term includes the evaluation of the needs of an individual with a disability for technology-related assistance, including a functional evaluation of the individual in the individual's customary environment. The phrase "customary environment" is intended to mean the various environments in which an individual engages in his or her major life activities. For example, for a school-age child, customary environments include the home and school environments.

Second, the term includes the purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by individuals with disabilities. The Committee intends that the purchase, lease, or otherwise providing for the acquisition of such devices must be consistent with the supplement, not supplant provision set out in section 102(e)(11) of the legislation. The Committee also intends that the phrase "or otherwise providing for the acquisition of" should be construed to permit the inclusion of innovative strategies for making devices available, including the lending out of previously used devices.

Third, the term includes the selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices.

Fourth, the term includes coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs. The Committee intends that, to the extent appropriate, activities associated with the provision of assistive technology devices and services should be incorporated into other planning activities conducted on behalf of and with individuals with disabilities. The Committee does not intend that activities associated with the provision of assistive technology devices and services should occur in isolation from or without consideration of other planning activities.

Fifth, the term includes training or technical assistance for an individual with disabilities, or, where appropriate, the family or representative of an individual with disabilities. The Committee believes that training of this sort is frequently an essential condition to ensure that the device is used in a manner that provides maximum benefit to the individual.

Sixth, the term includes training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of individuals with disabilities. Training of the persons with whom the individual with a disability is involved with is of equal importance as the training of the individual and his or her family or representative. If a teacher, for example, does not know the potential uses of the device, the student will not be able to attain his or her potential.

Section 3(7) also defines the term "technology-related assistance" to mean functions performed and activities carried out under title I of the Act in furtherance of the purposes of the Act, which were described previously in the Report. The Committee intends that the term includes the provision of and payment for assistive technology devices and assistive technology services.

The term "underserved group" means, as defined in section 3(8), any group of individuals with disabilities who, because of disability, place of residence, geographic location, age, race, sex, or socioeconomic status, have not historically sought, been eligible for, or received technology-related assistance. In developing and implementing statewide programs of technology-related assistance, the Committee expects States to take into account the technology-related needs of the full range of individuals with disabilities, some of whom, unless specifically referenced, may be overlooked. Some examples of individuals who fall into an "underserved group" include: individuals with multiple disabilities; individuals living in isolated areas, nursing homes, or group homes; and individuals out of the work force including the elderly, individuals from ethnic minorities, and the poor.

TITLE I—GRANTS TO STATES

Nature of the Program of Assistance to States

Section 101 of the bill specified the nature of the program of assistance to States; and includes non-exhaustive lists of functions that may be performed and activities that may be carried out to accomplish the purposes of the program.

Under section 101(a), the Secretary of Education is authorized to make grants to States to assist States to develop and implement consumer-responsive statewide programs of technology-related assistance that accomplish the purposes set out in section 2(b)(1) of the Act. The Committee expects the Secretary to place the administration of the programs authorized under this Act in the Office of the Assistant Secretary for Special Education and Rehabilitative Services. The Committee urges the Secretary, in delegating such authority to that office, to assign the initial responsibilities for the title I program to staff who have experience in programs associated with technology and in facilitating State initiatives in this area.

The Committee includes the phrase "consumer-responsive" in order to emphasize the importance of ensuring the active involvement of individuals with disabilities and their families or representatives in the decisionmaking process related to the development and implementation of a statewide program of technology-related assistance for such individuals, and of ensuring the direct involvement of an individual with disabilities and his or her family or representative in decisions associated with the selection and provision of assistive technology devices and services to that individual.

Functions of Programs

A State that receives a grant under title I may accomplish the purposes described in section 2(b)(1) by carrying out any of the 11 functions described in section 101(b) of the bill or through any other functions the Secretary considers appropriate. The 11 functions included in the bill are: (1) the identification of individuals with disabilities and ongoing evaluations of their needs for technology-related assistance; (2) the identification and coordination of resources, including entering into interagency agreements; (3) the provision of and payment for assistive technology devices and assistive technology services; (4) the dissemination of information; (5) the provision of training and technical assistance; (6) the development of a public awareness program; (7) the provision of assistance to statewide and community-based organizations; (8) the support of partnerships and cooperative initiatives; (9) taking steps to develop qualifications of staff including (if considered appropriate by the State) adding specific course requirements to professional training standards and certification and licensing criteria; (10) the compilation and evaluation of appropriate data relating to the program; and (11) the establishment of procedures for involvement of concerned individuals.

Authorized Activities

In carrying out the functions described above, a State may use grant funds for any activity necessary for developing, implement-

ing, or evaluating the statewide program of technology-related assistance. Section 101(c) includes illustrations of the types of activities that are permissible.

One authorized activity is support for model systems for the delivery of assistive technology devices and assistive technology services to individuals with disabilities that, if successful, could be replicated or made generally applicable. A model system may include the purchase, lease, or other acquisition of assistive technology devices and assistive technology services or payment for the provision of assistive technology devices and assistive technology services. The acquisition or payment for assistive technology devices and assistive technology services must be consistent with the supplement, not supplant assurance made in the State's application.

A model system may also include: the use of counselors, including peer counselors, to assist individuals with disabilities and the families of individuals with disabilities to obtain assistive technology devices and assistive technology services; the involvement of individuals with disabilities or, if appropriate, families or representatives of individuals with disabilities, in decisions related to the provision of assistive technology devices and assistive technology services to individuals with disabilities; and the evaluation of the efficacy of the particular model delivery system.

A second authorized activity included in the legislation is a statewide needs assessment. The needs assessment may be based on existing data and may include: estimates of the numbers of persons with disabilities; estimates of the number of individuals with disabilities in need of assistance and the nature of their needs; current and past efforts to address the needs; the costs of addressing needs; State, local and private resources (including insurance) available to establish a statewide program; and identification of State and Federal policies that facilitate or interfere with the operation of a statewide program.

The needs assessment may also include a review of alternative state-financed systems of subsidies for the provision of assistive technology devices and services, including a loan system for assistive technology devices, a low-interest loan fund, a loan insurance program, and a partnership with private entities for the purchase, lease, or other acquisition of devices or the provision of services.

Additional components of a needs assessment may include a review of State procurement policies and the extent to which such policies ensure, to the extent practical, that assistive technology devices purchased, leased, or otherwise acquired with assistance under title I are compatible with other technology devices; and an inquiry into practices of private insurance companies that facilitate or impede the payment for assistive technology devices and services.

An additional activity specified in the legislation is to encourage the creation, maintenance, and enhancement of statewide or community-based organizations or systems assisting individuals with disabilities to use assistive technology devices or services. The Committee intends that the phrase "community-based organizations or systems" includes family resource networks.

The authorized activities also include: a public awareness program designed to provide information about the availability and ef-

ficacy of such devices and services; a system of access to technology-related information including the preparation of information in diverse media forms (print, audio, video, and braille material) to accommodate individuals with disabilities (including those with sensory or cognitive limitations); information on funding sources and support groups; and a record of the extent to which citizens use the system. In addition, the legislation includes training and technical assistance relating to the use of such devices and services by individuals. The Committee believes that training activities are among the most critical a State may perform. For example, if States fail to train individuals with disabilities, their families or representatives, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including insurers, primary service providers, and specialized practitioners), employers, and other appropriate individuals, the promise of assistive technology devices for all categories of individuals with disabilities will not be realized.

The Committee recognizes that there is a limited supply of persons throughout the nation with the expertise necessary to evaluate the technology-related assistance needs of an individual with disabilities and determine the appropriate technology-related assistance for that individual. Throughout the Act the Committee has addressed this issue. It is expected that the States will develop a plan that is integrated with other plans to ensure a comprehensive system of personnel development, including the development of appropriate certification or licensure standards, standards for the preparation of such personnel, and the development and support of needed personnel preparation programs.

The legislation also makes it clear that a State may enter into cooperative agreements with other States to expand the capacity of the States to develop and implement statewide programs of technology-related assistance.

Development Grants

Section 102 of the bill directs the Secretary to award States 3-year grants to assist States to develop and implement statewide programs of technology-related assistance for individuals with disabilities. The Secretary may award on a competitive basis not more than 10 grants in the first year for which amounts are appropriated; 20 in the second year; and any number in the third year.

In making these awards, the Secretary, to the extent practical, must award grants to States in a manner that is geographically equitable and distributes the grants among States that have differing levels of development of statewide programs of technology-related assistance. The Committee intends that each competition for a development grant provides opportunities for funding to States with limited and moderate, as well as extensive activities and experiences in developing and implementing statewide programs in technology-related assistance for individuals with disabilities. The Committee intends that the term "geographically equitable" includes ensuring equity among urban and rural and small and large States.

For each of the first two years of the grant period, the award may not be less than $500,000 and not more than $1,000,000. For

the third year of the grant period, the grant may be for an amount between $500,000 and $1,500,000. The size of an award to a territory may not be more than $150,000 per year.

The Secretary must calculate the amounts of grants on the basis of three factors: (1) the amounts available to making grants; (2) the population of the State or territory concerned; and (3) the types of activities proposed by the State or territory relating to the development of a statewide program of technology-related assistance. It is the Committee's intent that the greater the magnitude of the effort and more comprehensive the activities proposed by a State, the more appropriate it is for the Secretary to award the maximum amount authorized.

The legislation also includes a priority for previously participating States. The Committee intends that States which successfully compete and receive funding be given priority consideration for funding prior to awarding funds to new grantees. Priority consideration is warranted for the first and earlier grantees to ensure continuity for initial State investments and for expansion and extension of efforts toward the implementation of statewide programs.

Any State that desires to receive a development grant must submit an application that includes a designation by the Governor of the office, agency, entity, or individual responsible for preparing the application; administering and supervising the statewide program; ensuring coordination among agencies; ensuring active, timely, and meaningful participation by consumers and others; and authorizing the delegation of any responsibilities described above, in whole or in part, to one or more appropriate offices, agencies, entities, or individuals.

The Committee recognizes that States use different governance systems for addressing the needs of individuals with disabilities. Thus, the legislation permits each State to determine how best to design and implement the statewide program of technology-related assistance for individuals with disabilities. It is expected that a State will include in its application the offices, agencies, entities, or individuals responsible for the varying functions set forth in this subsection.

The application must also specify the nature and extent of involvement of various State agencies and the public (including individuals with disabilities, the families or representatives of such individuals and private agencies and organizations) in the preparation of the application and the continuing role of such agencies and the public in the development of the statewide program. The Committee includes these provisions in order to effectuate the basic precepts of the legislation that the program be "consumer-responsive" and "statewide." It is the Committee's intent that public input be obtained prior to the submission of an application and prior to the formulation of significant revisions to State policies affecting the provision of technology-related assistance for individuals with disabilities.

In addition, the application must include a preliminary needs assessment and a description of State resources and other resources (to the extent information is available) to be committed to the development of the statewide program. The Committee considered, but rejected at this time, the inclusion of a cost-sharing or match

requirement. However, a State's willingness to commit its own resources (people or funding) to the development of the statewide program is certainly a factor the Secretary may consider in selecting States for participating in the program. At the end of the authorization period of this legislation, the Committee expects to give serious consideration to changing this program into a formula grant program and at that time requiring States to share in the program's costs.

Furthermore, the application must specify the State's goals, objectives, functions, activities, and outcomes expected at the end of the grant period with respect to the statewide program; the procedures used to compile information and conduct evaluations; and State policies with respect to contracts, grants, and agreements.

The application must also contain a number of assurances pertaining to: establishment of an equitable procedure for making technology-related assistance available throughout the State; compliance with the Act; supplementing, not supplanting existing or other resources; control of property and funds; reports; commingling of funds; fiscal control and acounting procedures; and availability of information.

The supplement, not supplant assurance set out in section 102(e)(11), specifies that amounts received under the development grant will be used to supplement amounts available from other sources that are expended for technology-related assistance, including the provision of assistive technology devices and services, and that, except as specified in the next paragraph, these amounts will not be used to pay a financial obligation for technology-related assistance (including the provision of assistive technology devices and services) that would have been paid with amounts available from other sources if amounts under the grant had not been available.

Funds made available under the grant may be used to pay for technology-related assistance that would have been paid with amounts from other sources only if such payment is made to prevent a delay in the receipt of appropriate technology-related assistance (including devices and services) by an individual with disabilities and the entity or agency responsible subsequently reimburses the appropriate account with respect to programs and activities under the grant in an amount equal to the amount of the payment.

For purposes of demonstrating compliance with this assurance, it is not the Committee's intent that a State be required to ascertain the aggregate amount expended in the State for technology-related assistance and then maintain that level. Such an obligation would be impossible to satisfy. Further, this provision should not be construed as requiring non-profit organizations to maintain their level of support for technology-related assistance.

Rather, the Committee expects that the Secretary will develop objective standards that are feasible to satisfy. For example, the Secretary could provide that a State is presumed to have violated this provision if, after the enactment of this legislation, a State agency modifies a policy that permits the funding of technology-related assistance so that it prohibits such funding. The State could rebut this presumption by demonstrating that the change would have occurred even if this legislation had not been enacted.

The assurance relating to availability of information (section 102(e)(16)) specifies that the State must make available to individuals with disabilities and the families or representatives of individuals with disabilities information concerning technology-related assistance in a form that will allow such individuals to effectively use such information. In preparing such information for dissemination in a manner that is consistent with the previous sentence, the State must consider the media-related needs of individuals with disabilities who have sensory and cognitive limitations and consider the use of auditory materials, including audio cassettes, visual materials (such as video cassettes and video discs), and braille materials.

Extension Grants

In accordance with section 103 of the legislation, the Secretary may award a 2-year extension grant to any State that demonstrates to the Secretary that it made significant progress in developing and implementing a statewide program of technology-related assistance under a development grant consistent with the requirements described above, and consistent with the purposes of the Act set out in section 2(b)(1).

The Secretary shall pay to each State that receives an extension grant an amount that is not less than $500,000 and not more than $1,500,000 per year. The Secretary must calculate the amount of the grant on the basis of the following four factors: (1) amounts available for making grants; (2) the population of the State; (3) the tyes of assistance to be provided; and (4) the amount of resources committed and available from other sources. The Committee intends that the fourth criterion serve as an incentive to the State to commit funds from other sources; thus, the more substantial the amount of resources committed and available within the State from other sources, the larger the amount the Secretary may award to the States. The bill also includes a priority for previously participating States.

A State that desires to receive an extension grant must submit an application that contains the following: (1) a description of the needs of individuals with disabilities for technology-related assistance, including individuals from underserved groups, families or representatives of individuals with disabilities, and other appropriate individuals within the State; (2) a description of the specific activities carried out under the development grant and the relationship of these activities to the development of a statewide program; (3) documentation of the progress made under the development grant toward development of a statewide program; (4) a description of State actions designed to determine the degree of satisfaction of concerned persons with the extent of their involvement, the specific activities carried out by the State, and progress made toward development and implementation of the statewide program; (5) a summary of any comments received and the State's responses; (6) the same type of information provided in the development grant application (except the preliminary needs assessment); and (7) an assurance that the State will comply with guidelines established under section 508 of the Rehabilitation Act of 1973, which address-

es making office equipment that is electrical accessible to individuals with disabilities.

Progress Reports

Section 104 of the legislation provides that each State that receives a development or extension grant must submit an annual report to the Secretary. The report must describe: (1) completed activities carried out under the grant including, to the extent appropriate, a description of the impact of such activities on individuals with disabilities, public agencies, financial resources committed to technology-related assistance for individuals with disabilities, community-based organizations, and employers; (2) unanticipated problems encountered in carrying out such activities; and (3) activities planned to rectify such problems in the following year. It is the Committee's intent that these reports be made readily available to the public at not cost. The Committee is partricularly interested in the impact of technology on the lives of individuals with disabililities, and expects reports to include examples of such impact.

In addition, each State that receives a development grant may include, and each State that receives an extension grant must include, the following information in the progress reports; (1) the types of assistance provided under the grant and the effects of the grant, especially with respect to individuals with disabilities; (2) the types of environments in which assistance was provided under the grant; and (3) how the information required by this report was derived.

Administrative Provisions

Sections 105 (a) and (b) of the bill direct the Secretary to establish a system to assess the extent to which States that receive development and extension grants are making significant progress in achieving the purposes of the title. The section calls for the Secretary to conduct onsite visits and specifies the purpose of the visits, and the procedures for corrective action plans, including penalties and appeals procedures.

Relationship Between Assistance Under This Legislation and Other Federal Laws

Section 105(c) specifies that nothing in title I of the legislation shall be construed to permit the State or any Federal agency to reduce medical or other assistance available or to alter eligibility under titles II, V, XVI, XVIII, XIX, or XX of the Social Security Act; the Education of the Handicapped Act; the Rehabilitation Act of 1973; or laws relating to veteran's benefits.

Authorization of Appropriations

Section 106 of the bill authorizes to be appropriated to carry out title I $9,000,000 for fiscal year 1989 and such sums as may be necessary for each succeeding fiscal year ending before October 1, 1993.

Under section 106(b)(1), the Secretary must reserve one percent of the funds appropriated in any fiscal year or $500,000 whichever is greater, for the purpose of providing States with information and technical assistance with respect to the development and imple-

mentation of statewide programs of technology-related assistance. The Committee intends that information and technical assistance be made available to all States, not just those States that receive development or extension grants. Under section 106(b)(2), the Secretary may reserve such sums as the Secretary considers necessary to conduct onsite visits.

Evaluation

Section 107 of the bill directs the Secretary, directly or by contract, to conduct a national evaluation of the program of grants to States and report to the Congress not later than October 1, 1992. The Secretary is also expected to work with the States to consider and develop a uniform information system designed to report and compile a qualitative and quantitative description of the impact of the program of grants to States under title I.

The Committee recognizes that these evaluation activities are likely to be complex, time consuming, and require new approaches to Federal evaluation and multi-state reporting. This is because the technology-related needs of individuals with disabilities cannot be considered in isolation and because of the difficulty of identifying and measuring the impact of such assistance on the individual, others involved with the individual, agencies, financing, and other factors. The Committee believes, however that such evaluation efforts are essential for the long-term viability of Federal and State efforts in technology-related assistance.

Title II Programs of National Significance

Financing Study

Section 201 of the bill directs the National Council on the Handicapped to conduct a study and make recommendations to the Congress and the President concerning the financing of assistive technology devices and assistive technology services for individuals with disabilities. Specifically, the bill identifies four topics that must be addressed.

First, the Council must review Federal laws, regulations, procedures and practices that facilitate or impede the ability of the States to develop and implement consumer-responsive statewide programs of technology-related assistance for individuals with disabilities.

Second, the Council must review Federal and State laws, regulations, procedures, the practices that facilitate or impede the acquisition of, financing of, or payment for assistive technology devices and assistive technology services for individuals with disabilities.

Third, the Council must review policies, practices and procedures of private entities (including insurers) that facilitate or impede the acquisition of, financing of, or payment for assistance technology devices and assistive technology service for individuals with disabilities.

Fourth, the Council is directed to make recommendations concerning alternative strategies for acquiring or paying for assistance technology devices and assistive technology services.

The Council is also directed to appoint an Advisory Committee. The Advisory Committee must include individuals from both the

public and private sectors who have broad experience and expertise directly relevant to the issues to be studied and must also include individuals with disabilities, members of families of individuals with disabilities, and representatives of organizations representing individuals with disabilities.

The bill directs all Federal agencies to cooperate with the Council in carrying out its duties and authorizes the Council to use resources of Federal, State, and local agencies, with their consent.

A final report, together with recommendations (including proposals for legislation), must be submitted by the Council no later than 18 months after funds are appropriated to carry out this study.

National Information and Program Referral Network

Part B of title II of the legislation concerns the establishment of a national information and program referral network. Within a prescribed period, the Secretary must conduct a study to determine the feasibility and desirability of creating a national information and program referral network to assist States to develop and implement consumer-responsive statewide programs of technology-related assistance and to determine the appropriate structure for the organization and operation of such a network if it is determined to be feasible and desirable.

If the Secretary determines that establishment and operation of such a network is appropriate, the Secretary must, within the prescribed period, enter into any contract or cooperative agreement necessary to establish and operate such a network. The network may consist of information and program referral networks in existence or under development at the time of the study.

The Committee intends that the national information and program referral network will be used to enhance the ability of States to provide necessary information to individuals with disabilities, families or representatives of such individuals, professionals and community-based organizations working with such individuals, and others in need of information within the States.

The Committee recognizes that there are two general categories of information that States must be able to make available to such individuals. The first category includes information that is State-specific, such as a listing of individuals within the State who can help a farmer with a disability adapt a tractor. The second category includes information that is general in its applicability. For example, the development of a manual on how to adapt a tractor would be relevant for farmers with disabilities in all States. It is the Committee's intent that the national network provide States with the second category of information so that the States are not constantly "reinventing the wheel."

It is also the Committee's intent that where particular expertise is required to provide specialized information, mechanisms be included in the network that ensure that specialized needs assessments can be conducted and the specialized information can be developed and disseminated. For example, the Committee believes that a special mechanism should be included in the network for addressing the needs of farmers with disabilities. It is also the Committee's intent that the Secretary make maximum use of existing programs.

Training and Public Awareness Projects

The critical role that training plays in effectuating the overall goals of this legislation was previously stated in this Report. The Committee believes that in order to develop and implement effective programs in technology-related assistance for individuals, many groups, organizations, professions, business associations, and consumer-related entities must be provided the opportunity to acquire knowledge about how technology can benefit individuals with disabilities. The Committee anticipates that once trained and informed about the efficacy of and methods for acquiring technology, individuals from such groups will have a greater impact on the policies, procedures, and practices that affect the availability of, and access to, assistive technology devices and services for all categories of individuals with disabilities.

Part C of the bill authorizes the Secretary to fund training and public awareness projects. With respect to training, two distinct categories of projects are authorized. First, under section 221(a) of the bill, the Secretary is authorized to enter into contracts or cooperative agreements with appropriate nonprofit or for-profit entities for the purposes of conducting training sessions and developing, demonstrating, disseminating, and evaluating curricula, materials, and methods used to train individuals regarding the provision of technology-related assistance.

Activities conducted under these contracts or cooperative agreements may address the training needs of individuals with disabilities, the families or representatives of individuals with disabilities, individuals who work for public agencies and private entities that have contact with individuals with disabilities (including primary service providers, specialized practitioners, and insurers), employers, and other appropriate individuals (such as electrical engineers and computer specialists).

The Committee believes that it would be appropriate for the Secretary to enter into contracts with a number of different organizations, each of which has experience working with a specific category or categories of individuals. The contractor would develop appropriate training materials and then train individuals to be trainers. These trainers could then train others working in the field.

It is also the Committee's intent that the Secretary may utilize the authority under section 221(a) to develop curricula, materials, and methods that can be utilized in both preservice and inservice training programs across the country to meet the personnel preparation needs established by the State. It is the Committee's intent that training provided to the groups delineated above may include the specialized application of existing and future technology, with little or no modification, for use by persons with cognitive and other impairments.

The second category of training grants authorized under the bill is grants under section 221(b) to assist institutions of higher education prepare personnel for careers relating to the provision of technology-related assistance to individuals with disabilities. In awarding grants, priority must be given to the preparation of personnel requiring advanced knowledge who will be able to prepare other personnel to provide technical assistance, administer programs, or

prepare personnel necessary to support the development and implementation of consumer-responsive statewide programs of technology-related assistance to individuals with disabilities. In awarding such grants, it is expected that the Secretary will give positive consideration to institutions of higher education that can demonstrate an ability to prepare personnel and demonstrate a commitment to supporting and maintaining such personnel preparation programs. Funds may be used to assist in covering the cost of courses of training or study for such personnel and for establishing and maintaining fellowships or traineeships with such stipends and allowances as may be determined by the Secretary.

The Committee recognizes the need for trained professionals in the areas of technology-related assistance. Currently, there are a limited number of training programs that train such professionals in such areas, and such training is often only a part of or secondary to other areas of expertise development. By giving emphasis to leadership development and training of trainers in technology-related assistance under section 221, the Committee expects that grant funds will complement other training initiatives funded by the Department of Education and expedite the availabilty of needed expertise in technology-related assistance for individuals with disabilities.

Section 222 authorizes the Secretary to make grants to, or enter into contracts with, nonprofit and for-profit entities to carry out national projects that recognize, and build awareness of, the importance and efficacy of assistive technology devices and assistive technology services for individuals of all ages with disabilities functioning in various settings of daily life.

Funds may be used for a national media campaign, convening national and regional conferences, preparing and disseminating information, encouraging others to hold national and regional conferences, and developing and maintaining recognition programs that are designed to promote public credit to entities that demonstrate an aggressive effort for a sustained period of time to provide or promote the use of technology-related assistance or the development of assistive technology devices.

The Committee anticipates that such activities will complement training activities funded under this section, serve to educate the general public about the benefits of technology, and promote proactive partnerships between the public and private sectors that will make assistive technology devices and services more readily available to individuals with disabilities.

Section 223 directs the Secretary to establish priorities for grants under part C, by publishing proposed priorities beginning with fiscal year 1991 in the Federal Register for comment and then in final form along with an explanation of how the priorities were determined. In any year, program announcements may be published currently with or after the publication of final priorities.

Demonstration and Innovation Projects

Part D of title II of the bill provides authority for these distinct categories of demonstration and innovation projects. The first category is model projects for delivering assistive technology devices and services to individuals with disabilities functioning in various

environments and carrying out various life activities, including model systems described in section 101 of title I. The Committee intends that the Secretary shall have discretion to fund varying approaches for delivering devices and services, including but not limited to, center-based and mobile systems. The Committee includes this provision because of its belief that the Federal Government should play a critical role in facilitating the development of model service delivery systems.

The Committee expects that model service delivery projects that are awarded in States that have title I State grants will complement and augment efforts under such grants to provide model service delivery projects and other technology-related assistance to individuals with disabilities. The Committee expects that projects funded in States that do not have such grants will address acknowleged technology-related needs and help prepare the State to participate in the State grant program under title I.

The second category of demonstration and innovation projects includes the conduct of applied research and development projects. The bill includes four examples of the types of projects that the Committee expects might be funded. The first example is projects designed to increase the availability of reliable and durable devices that address unique, low-market demand, or complex technology-related needs for individuals with disabilities. The Committee recognizes that some individuals have special technology-related needs that require customization. Meeting such needs can be time-consuming and expensive. However, the strategies associated with such customization, in many instances, can benefit others with similar needs. The Committee anticipates that projects funded through the applied research and development authority should result in customization strategies, such as engineering blueprints and modularization of technological components that will have general applicability.

The second example is projects designed to develop strategies and techniques that involve individuals with disabilities in assessing the performance characteristics of technology that is not designed specifically for individuals with disabilities, and developing adaptations of such technology for individuals with disabilities. The Committee believes that the effectiveness of many assistive technology devices can be increased if their performance can be assessed by users before mass marketing and before purchase. The Committee intends that the authority to fund such initiatives will be an incentive to producers to test devices before mass production. This authority should be particularly attractive to such producers with limited capital.

The third example is projects designed to assist in the transfer of technology that is not specifically designed for individuals with disabilities to uses appropriate for such individuals. The Committee believes that with simple modifications, many everyday devices could be used by individuals with disabilities. Examples of such modifications include modification in pressure required to operate a device, or weight, shape, or color of a device or other similar modification. Such modifications would not necessarily affect the utility of such products by the general public, but would often, for the first time, allow individuals with disabilities to use them.

The fourth example is projects designed to facilitate effective and efficient technology transfer. The Committee expects the phrase "facilitate effective and efficient technology transfer" to be construed as broadly as possible, and to include the application of technology innovations from diverse fields to meet the needs of persons with disabilities and the modification of assistive technolgoy devices designed for individuals to meet the technology-related needs of individuals with different functional limitations.

The third category of demonstrations included in part D is an income-contingent direct loan demonstration project that would examine the feasibility of a direct loan program that would provide loans to individuals with disabilities who require technology-related assistance in order to maintain a level of functioning or to achieve a greater level of functioning in any major life activity, or loans to purchase such devices for such individuals by their families or employers of individuals with disabilities on behalf of such individuals. the Secretary is also directed to report back to Congress concerning the feasibility of operating such a program beginning after September 30, 1993.

The Committee recognizes that such a Federal effort is unique. However, given that the cost associated with acquiring technology is one of the most significant barriers to overcome, the Committee believes that giving this authority to the Secretary, with broad discretion, will offer one more option for promoting access to assistive technology devices for individuals with disabilities.

Authorization of Appropriations for Title II

Section 241 of the bill authorizes to be appropriated for purposes of carrying out title II of the bill (other than section 231(b)(1) pertaining to model projects for delivering assistive technology devices and services) $5,000,000 for the fiscal year 1989 and such sums as may be necessary for each of the fiscal years 1990, 1991, 1992, and 1993. There are authorized to be appropriated for purposes of carrying out the model projects for delivering assistive technology devices and services $1,500,000 for the fiscal year 1989 and such sums as may be necessary for each of the fiscal years 1990, 1991, 1992, and 1993.

The bill also includes several priorities for the funding of projects under title II. First, notwithstanding any other provisions included in the legislation, if amounts appropriated for purposes of carrying out this legislation for the fiscal year 1989 equal or exceed $6,000,000, the Secretary must first make available, from such amounts, not less than $500,000 for model projects for delivering assistive techology devices and services.

Second, with respect to other title II activities, the Secretary must first make available from the amount appropriated under title II for fiscal year 1989 not more than $250,000 for purposes of carrying out the study of the financing of assistive technology devices by the National Council on the Handicapped. Subject to the priority described in the previous sentence, of the amounts appropriated under title II for any fiscal year, the Secretary must first make available, in order of priority, not more than $750,000 for purposes of carrying out the study of the feasibility of establishing a national information and program referral network, and such

sums as may be necessary for purposes of carrying out such a national network, if deemed appropriate by the Secretary.

The Committee establishes these funding priorities for two reasons. First, the Committee expects that the National Council on the Handicapped has the capacity and experience to determine quickly the adequacies and inadequacies of policies, procedures, and practices associated with financing assistive technology devices and services, and make recommendations for necessary changes to the Legislative and Executive Branches in a timely manner.

Second, in order to facilitate the implementation of a National Information and Program Referral Network by fiscal year 1993, it is important to begin the feasibility study authorized in the legislation as soon as possible. The feasibility study, as well as the contract-award activities associated with the Network, will take a substantial period of time even if activities are initiated on the date of enactment.

VII. Regulatory Impact

The Committee has determined that there will be minimal increase in the regulatory burden imposed by this bill.

VIII. Cost Estimate

U.S. Congress,
Congressional Budget Office,
Washington, DC, July 18, 1988.

Hon. Edward M. Kennedy,
Chairman, Committee on Labor and Human Resources,
U.S. Senate, Washington, DC.

Dear Mr. Chairman: In response to your request, the Congressional Budget Office has prepared the attached cost estimate of S. 2561, the Technology-Related Assistance for Individuals With Disabilities Act of 1988, as ordered reported from the Senate Labor and Human Resources Committee on July 14, 1988.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

James L. Blum,
Acting Director.

Attachment.

Congressional Budget Office Cost Estimate

1. Bill number: S. 2561.
2. Bill title: Technology-Related Assistance for Individuals With Disabilities Act of 1988.
3. Bill status: As ordered reported from the Senate Labor and Human Resources Committee, July 14, 1988.
4. Bill purpose: The purpose of this bill is to authorize through 1993 three new grant programs for technology-related assistance for individuals with disabilities. These grants are subject to subsequent appropriations action.
5. Estimated cost to the Federal Government:

[By fiscal years, in millions of dollars]

	1989	1990	1991	1992	1993
Estimated authorization levels:					
Grants to States	$9.0	$9.4	$9.7	$10.1	$10.5
Programs of national significance	5.0	5.2	5.4	5.6	5.8
Model service delivery projects	1.5	1.6	1.6	1.7	1.8
Total estimated authorization	15.5	16.2	16.7	17.4	18.1
Estimated total outlays	11.9	15.4	16.5	17.2	17.9

The costs of this bill fall in Function 500.

Basis of estimate: The authorization levels for the grants to states, the programs of national significance, and the model delivery projects are those stated in the bill for 1989. The outyear authorization levels reflect the 1989 stated levels adjusted for inflation. Outlay estimates assume full appropriation of authorization levels at the start of the fiscal year and reflect the spending patterns of other current-year funded Department of Education programs.

6. Estimated cost to State and local government: The grants to states are to be awarded on a competitive basis. There is no federal government matching requirement.

7. Estimate comparison: None.

8. Previous CBO estimate: None.

9. Estimate prepared by: Deborah Kalcevic (226–2820).

10. Estimate approved by: C.G. Nuckols for James L. Blum, Assistant Director for Budget Analysis.

IX. Relationship to House Report

S. 2561, as reported out of the Committee on Labor and Human Resources, is identical to H.R. 4904, as reported out of the Education and Labor Committee, U.S. House of Representatives. The statements of congressional intent contained in this report are identical to the statements of intent contained in the House Report accompanying H.R. 4904.

X. Section-by-Section Analysis

Section 1. This section specifies the short title of this Act as the "Technology-Related Assistance for Individuals With Disabilities Act of 1988."

Section 2. This section specifies the findings and purposes of the Act.

Section 3. This section includes definitions of the following terms: "assistive technology device," "assistive technology service," "individual with disabilities," "institution of higher education," "Secretary," "State," "technology-related assistance," and "underserved groups."

Section 101. This section authorizes the Secretary of Education to make grants to States to assist States to develop and implement consumer-responsive comprehensive statewide programs of technology-related assistance and specifies the functions and activities the States may perform under these grants.

Section 102. This section directs the Secretary to award 3-year development grants on a competitive basis; specifies the maximum number of grants to be awarded in a fiscal year; specifies the minimum and maximum amounts of the grants; specifies the criteria to be used for calculating the amounts of the awards; provides a priority for previously participating States; specifies the priorities for distribution; and delineates the information and assurances contained in a State's application.

Section 103. This section directs the Secretary to award 2-year extension grants; specifies the minimum and maximum amounts of the grants; specifies the criteria to be used for calculating the amounts of the awards; includes a priority for previously participating States; and delineates the information and assurances contained in a State's application.

Section 104. This section requires States receiving development or extension grants to submit an annual progress report to the Secretary.

Section 105. This section directs the Secretary to establish a system for assessing States receiving development and extension grants, including onsite visits and corrective action plans. This section also specifies that nothing in title I may be construed to permit the State or any Federal agency to reduce medical or other assistance available or to alter eligibility under specified Federal laws.

Section 106. This section provides authorization for appropriations for title I.

Section 107. This section directs the Secretary to undertake an evaluation of the program of grants and directs the Secretary to work with the States to consider and develop an information system.

Section 201. This section directs the National Council on the Handicapped to conduct a study on the financing of assistive technology devices and assistive technology services for individuals with disabilities.

Section 211. This section directs the Secretary to determine whether it is appropriate to establish and operate a national information and program referral network to assist States in developing and implementing statewide programs of technology-related assistance and if determined to be appropriate, authorizes the Secretary to enter into any contract or cooperative agreement necessary to establish and operate such a network.

Section 212. This section directs the Secretary to conduct a study of the feasibility and desirability of establishing such a network.

Section 213. This section specifies the contents of the study referred to in section 212.

Section 214. This section specifies the timetable for the study referred to in section 212.

Section 221. This section authorizes the Secretary to make grants or enter into contracts or cooperative agreements for training.

Section 222. This section authorizes the Secretary to make grants or enter into contracts or cooperative ageements to carry out public awareness projects.

Section 223. This section directs the Secretary to establish and publish priorities for training and public awareness projects.

Section 231. This section authorizes the Secretary to fund demonstration and innovation projects, including: model projects for delivering assistive technology devices and services; model research and development projects; and income-contingent direct loan demonstration projects.

Section 241. This section authorizes appropriations for title II of the Act.

XI. Changes to Existing Law

Section 12 of Rule XXVI of the Standing Rules of the Senate requires publication of any changes made in existing law by the reported bill. This bill makes no changes to existing law.